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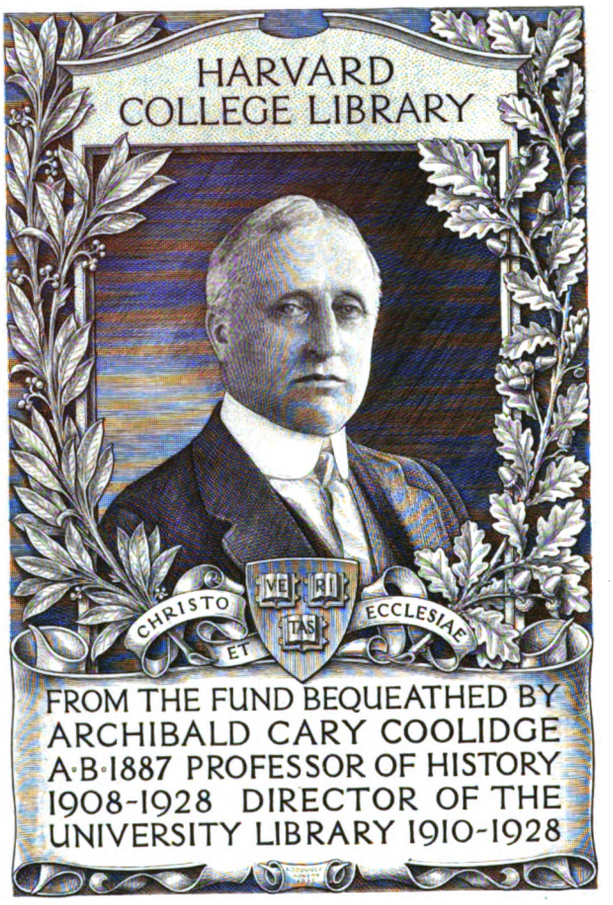

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ROYAL COMMISSION ON MINES.

MINUTES OF EVIDENCE

TAKEN BEFORE THE

ROYAL COMMISSION ON MINES,

WITH INDEX AND APPENDICES.

VOLUME III.

Presented to both Houses of Parliament by Command of His Majesty.

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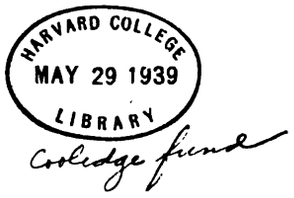

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ROYAL COMMISSION ON MINES.

PREFACE.

This volume contains the evidence submitted to the Royal Commission on Mines by representatives of the workmen in mines under the Coal Mines Regulation Acts. The evidence of a few other witnesses not representing the workmen is also included. The previous volumes issued by the Commission are :—

Minutes of Evidence, Volume I. [Cd. 3549], containing the evidence submitted by the Home Office and the Inspectors of Mines.

Minutes of Evidence, Volume II. (Cd. 3873], containing the evidence submitted by representatives of the coal owners, by mining engineers and others on the means of dealing with the dangers from explosions of coal dust, &c.

First Report [Cd. 3548], containing the interim recommendations of the Commission on the use of breathing appliances in rescue work after an explosion.

Codes of Rules in force in Mines and Quarries in the United Kingdom.

31, Great George Street,

Westminster, S.W.,

1*st October*, 1908.

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MINUTES OF EVIDENCE

TAKEN BEFORE THE

ROYAL COMMISSION ON MINES.

THIRTIETH DAY.

Wednesday, 29th May, 1907.

PRESENT:

Lord MONKSWELL (*Chairman*).

H. H. S. CUNYNGHAME, Esq., C.B.
WM. ABRAHAM, Esq., M.P. (Rhondda).
F. L. DAVIS, Esq.
ENOCH EDWARDS, Esq., M.P.
THOMAS RATCLIFFE ELLIS, Esq.
JOHN SCOTT HALDANE, Esq., F.R.S.
ROBERT SMILLIE, Esq.
S. W. HARRIS, Esq. (*Secretary*).

Mr. THOMAS RICHARDS, M.P., called and examined.

Mr. T. Richards, M.P.

29 May, 1907.

STATEMENT OF WITNESS.

19621. (1) *Government Inspection.*—The number of Government Inspectors is totally inadequate to secure anything approaching an efficient systematic inspection of the collieries, and I would suggest the creation of another class of assistant inspectors, one to every 10,000 workmen employed in the district, only persons having practical knowledge and experience of working in the mines to be eligible, and preference to be given those who hold certificates of competency under the present Act.

(2) *Inspection by Workmen under General Rule* 38.—If the foregoing was in operation I should not seek to alter Rule 38; otherwise Rule 38 should be amended so as to permit the appointment by the workmen of persons as examiners "who are," or have been, "practical underground workmen." From some cause or other the workmen do not use the power given them in Rule 38 as extensively as I think they should do.

(3) *Inspection under General Rule* 4.—The method of appointment of the officials under this rule is very unsatisfactory, as the owner, agent, or manager may appoint persons who have none of the special qualifications necessary for the efficient discharge of the important duties of firemen. One of the most important officials having to do with the safety of the colliery can be appointed without any test as to his fitness for the position. I would strongly urge a qualifying examination and certificate of competency.

(4) The firemen in South Wales and Monmouthshire have such a variety of duties to perform that it is practically impossible for them to make a minute examination of the district under their care, and often those districts are so extensive in themselves as to render careful examination of all parts of the workings and roadways impossible in the time limit before the shift. They are working much too long hours—10 to 12 and sometimes 14 hours a day being worked by these officials, and the measure of their efficiency is the amount of coal they can get out of their district rather than their attention to the ventilation, gas, and the safety of the working places.

(5) *Fines and Discipline.*—I do not agree with the enforcement of discipline by fines at the colliery, and was unaware of its being so frequently done until it was given in evidence before this Commission.

(6) *Special Rules.*—I think it would in some measure tend to a better observance of the Mines Act and Special Rules if in the first instance it was made obligatory upon the officials to supply every workman they employ with a copy, and would be further assisted if arrangements were made to distribute periodically printed copies of the portion dealing with spragging, timbering, riding on trams, care of safety lamp, &c.

(7) I think Special Rules should be prepared by the Secretary of State, after ascertaining the views of the owners and workmen, and should be confirmed by Parliament.

(8) *Accidents; Falls of Roof and Sides.*—I think a more regular systematic method of timbering would reduce the number of this class of accident.

(9) *Haulage Accidents.*—Travelling roads, independent of the haulage roads in which the hauling is done by machinery, should be provided, or such haulage roads should be of sufficient width to admit of a footpath clear of the trams. I am informed that in places where they have this width at present it is rendered useless for walking on by old timber, rubbish, &c., being allowed to accumulate.

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Mr. T. Richards, M.P.

29 May, 1907.

(10) *Explosions.*—I would urge upon the Commission the necessity of an exhaustive inquiry into the best method of dealing with coal dust with a view of minimising the extent of any explosion that may take place, and, while leaving the question of watering and other scientific methods to those better qualified to deal with the subject, I believe that a closed tram filled only to the level will considerably reduce the amount of dust made by the transit of the coal. A large number of collieries make no provision for preventing the dust from the surface screens, &c., going down the shaft.

(11) *Safety Lamps.*—The present practice of allowing the colliery manager to select the type of lamp and the quality of the oil to be used is not satisfactory.

(12) Rule 8 requires alteration. I should insist upon the use of safety lamps in all ventilating districts where inflammable gas is found, and that safety lamps and naked lights should not be permitted in the same ventilating district.

(13) Firemen should report the presence of gas if found in their inspection during the working shift.

(14) *Ambulance and Rescue Work.*—Proper ambulance appliances, splints, bandages, stretchers, &c., should be kept in each district in the mine and not "at the mine." Provision should be made for dealing with an explosion at every colliery, and every appliance possible to assist rescue work kept in readiness, and workmen trained for the purpose.

(15) *Investigations into Mine Accidents.*—I do not consider the present system of coroners' enquiry satisfactory, and it should in all cases of serious accidents be supplemented by the investigation authorised by Section 45.

(16) *Sanitation.*—No case of ankylostomiasis in South Wales or Monmouthshire has come to my notice, but there is room for improvement in the sanitary condition of our mines in the interest of the general health of the miners.

19621A. (*Chairman.*) I observe that you deal, in the first place, with Government inspection, and you say that the number of Government inspectors is totally inadequate to secure anything approaching an efficient systematic inspection of the collieries. What would you call an efficient systematic inspection?—I would not call the inspection that is evidently being made at the present time, and the only one that can be made by the present staff of inspectors, an efficient systematic inspection.

19622. In what respect does that inspection fall short of the efficient systematic inspection you would like to see?—It is impossible for the present inspectors to make an inspection of any kind of all the collieries in their districts more than at intervals of twelve months, say, and in some cases, even, collieries are not inspected in that period at all. Then, as I understand, the inspection when it is made is not a systematic inspection of the colliery: part of the colliery is inspected, and that is taken to be representative of the whole. To me as a practical working miner it is astonishing that an inspector should sample a colliery like you would sample a piece of cloth, taking one piece to represent the other. I think it is a most dangerous practice.

19623. Most of the inspectors, I think, were fairly satisfied that they could do the work which they considered was necessary to be done in the way of inspection?—I have read some of the evidence given by the inspectors, and that is what I would like to call special attention to, viz., the statement that they examine a portion of the colliery and take that as being representative of the whole. I think it is quite possible that in one portion of a colliery everything may be perfectly safe and all the rules observed; whereas in another portion of a colliery some practice may be in operation that at any moment might upset the whole ventilating system, for instance, of the colliery.

19624. You think that under the present system it is quite likely that some practice of that kind, which might be dangerous to miners, is in existence in one part of the mine without the inspector knowing it, and which, in the case of an inspection of one part of the mine, and talking to the men or the manager, he would not be likely to discover?—That is so. We have several seams being worked in the same mine, for instance, and it is possible for things to be all right in one seam, whereas they might be quite the contrary in the other. I think it gives a false sense of security to both workmen and owners that inspectors should visit a colliery in this way, because they may base their calculations that everything is all right on the inspection, whereas the inspector is only inspecting a very small portion of the colliery.

19625. It would be the duty of the inspector not only to inspect part of the colliery, but to talk to the men and try to find out what was going on throughout the colliery?—The workmen in one district of a colliery would have no knowledge whatever of what was taking place in the other. They are strictly prohibited from going to any other place in the colliery but their own working place.

19626. But when they came to the surface they would meet together, and to some extent discuss anything in the mine?—That is so: and I have reason to believe that sometimes the attention of the inspector has been called by that method to some practice which ought to be attended to.

19627. Still, you do not think that is sufficient?—I do not think so.

19628. Although the attention of the inspector is sometimes called to matters connected with the safety of the miners in that way, still you think there may be occasions when something is going on in other parts of the mine which he knows nothing of?—That is so.

19629. You would deal with that, apparently, by the creation of another class of inspector. Would you increase the present class of inspector?—I see no objection to even increasing the present class of inspector, but I think that another class of inspector, not appointed by the present method of appointment, but by some other method of appointment, should be created.

19630. First of all, deal with the present class of inspector and assistant-inspector. Do you think that that class ought to be increased or not? Do you think there ought to be more than the 12 inspectors and more than the 26 assistant inspectors?—Yes.

19631. To deal first of all with the inspectors, do you consider the 12 inspectors a sufficient number?—I do not. I do not see how they can, even as chief inspectors, with the number of assistants they have, exercise really the functions of a chief inspector as they ought to be exercised. Let me give an instance. I think Mr. Martin is the chief inspector in one district, and he in his district has 382 collieries under the Coal Mines Act and Metalliferous Mines Act, and they employ 62,756 workmen.

19632. You think that Mr. Martin's district ought to be split up?—I think so. The area is so enormous, too, from Devonshire to Monmouthshire.

19633. You would probably say, in the first place, then that the class of principal inspectors ought to be somewhat increased?—I think so.

19634. How many would you suggest?—I would not like to suggest any number.

19635. Do you think that the present proportion of assistant inspectors to inspectors is the proper proportion, viz., about two to one?—No; I daresay a chief inspector could do with another assistant.

19636. You think there ought to be at present three assistants to every chief inspector, instead of two?—I do not see why he should not have three.

19637. I am dealing with the class of inspector which at present exists?—Quite so.

19638. Your suggestion is that the present class of chief inspectors and the class of assistant inspectors should be considerably increased, say by something like 50 per cent.?—I think so.

19639. You also suggest that another class of inspector should be appointed, one for every 10,000 workmen employed in the district. How many would that be on an average for each district?—I have not worked that out.

19640. There are about 800,000 workmen, and it comes to about 80 for the whole country?—It would be so.

19641. In each district you would have 7 or 8 of these inspectors?—Yes.

19642. According to you, you would have the district sub-divided, instead of into 12 districts, say 15 or 16 districts, and in each of those 15 or 16 districts you would have three assistants instead of two assistants under the present scale of pay, as I understand, and in addition to that you would have some six or seven of your class of inspectors, that is another class of inspector, in each district?—I do not want to suggest what increase should be made in the present staff of inspectors or the present staff of assistant inspectors; what I say is that the present number is certainly inadequate to perform the functions that we think the Government inspectors should perform.

19643. Your principal point is that in every district you would have six or seven, or perhaps seven or eight, inspectors of a different class?—That is my chief point.

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19644. How much do you suggest they should be paid ?—I do not think I should suggest the salary, either.

19645. Or whether they should be appointed by the Home Office, as the other inspectors are ?—I am not quite satisfied even that the method of appointing the present inspectors is the very best method.

19646. How are the present inspectors appointed ?—I understand the method of appointment at present is that the Home Office has the nomination absolutely.

19647. (*Mr. Cunynghame.*) It is not absolute: they nominate a number of people to compete ?—Unless nominated they cannot sit for a competitive examination.

19648. It is not an open competitive examination ?—It is not.

19649. (*Chairman.*) Do you suggest that there should be open competition ?—That is my suggestion.

19650. That is, if anyone wishes to be a mines inspector, and succeeds in open competition, then he should be appointed ?—Yes.

19651. (*Mr. Enoch Edwards.*) What is meant by "anyone" which his Lordship puts in his question ? It must be a man with some knowledge ?—I take it no one would enter a competitive examination unless he had some special qualification.

19652. (*Chairman.*) At present I understand no one is allowed to compete who has not served for a certain number of years in a mine, or passed a certain examination ?—Quite so. I did not mean that you should remove those restrictions, of course.

19653. You would keep those up ?—Yes. I have gone upon the assumption that the Home Office would not think of appointing an inspector who was not in possession of a colliery manager's certificate.

19654. Would you suggest there should be some sort of provision for the appointment of mines inspectors, as there is for mine managers, and that a man must have some practical acquaintance with a mine, or something of that sort ?—I would. I quite agree with what has been said here, and I do not think we have any complaint with respect to the inspectors appointed even under the present system: still, it is open to this, that they might be appointed without having any practical knowledge of mines at all.

19655. You would like some sort of rule as there is laid down for managers, that no man should be allowed to sit for an examination, we will say (supposing that it was necessary for a mines inspector to pass an examination), who had not a practical acquaintance with mines. Now it is not necessary, as I understand—a mines inspector has only to pass an examination, because the Home Office says he must pass an examination, but the Home Office might say to-morrow, "We will appoint anyone without an examination," as I understand you ?—That is so.

19656. The only statutory requirement is that the Secretary of State must appoint a fit person ?—Yes.

19657. You suggest definite rules should be laid down by Act of Parliament restricting the class of persons who might be appointed mines inspectors by the Home Office ?—I do.

19658. And the same would apply to assistant inspectors, I suppose ?—Yes.

19659. Then with regard to the third class of inspectors, you suggest that in the same way they should be subjected to some kind of examination ?—Yes. You will notice I have said, I think, that preference should be given to those who hold a certificate of competency under the present Act, viz., the colliery manager's certificate.

19660. Either a manager's or under-manager's certificate ?—No—manager's certificate.

19661. (*Mr. Ratcliffe Ellis.*) They are all manager's certificates, but they are first and second class ?—Yes—first class, I mean.

19662. (*Chairman.*) Do you think that you would get a great many people who have passed this first-class examination to compete for this third class of inspectorship ?—I think so.

19663. In that case I suppose they would have to be paid fairly well ?—Yes. We have a large number of colliery workmen, at present, who hold these certificates.

19664. First-class certificates ?—First-class certificates, and they are, at present, ordinary colliers.

19665. How are they paid ?—They are only paid the ordinary collier's wages.

19666. And many of them have obtained a first-class certificate ?—Yes, and a greater number still have the second-class certificate only, because they have no opportunity of getting a position, and there is no inducement for them to go for a first-class certificate.

19667. But they would be capable of obtaining a first-class certificate, you think ?—I think so.

19668. Have you any idea what sort of proportion of ordinary colliers would be capable of obtaining a first-class certificate ?—I have not.

19669. A good many ?—I think a good many.

19670. (*Dr. Haldane.*) They are usually firemen, or men holding some official position ?—No, I mean the ordinary working colliers who attend mining classes and qualify during their spare time, and still follow their occupation. That is one of the few complaints we have against the colliery owners, that these men are not given the position of firemen, although qualified, and have obtained a second-class colliery manager's certificate: but other men, without those qualifications, working in the same pit and in the same district, are often appointed firemen.

19671. (*Chairman.*) You propose to make some alteration in the working of Rule 38, and you say that Rule 38 should be amended so as to permit the appointment by the workmen of persons as examiners "who are" or have been "practical underground workmen." The words of the Act now are: "may from time to time appoint two of their number or any two persons, not being mining engineers, who are practical working miners." What is the difference ?—The difference is the interpretation put by some colliery owners, viz., that a practical working miner must be a hewer. Some colliery people interpret those words as confining the selection of these examiners to those who are hewers.

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19672. (*Mr. Smillie.*) And have not the Law Courts held that to be so ?—I think so.

19673. (*Mr. Ratcliffe Ellis.*) In the Act of Parliament, Rule 38, it is: "who are practical working miners," and Mr. Richards' amendment is "who are, or have been, practical miners" ?—I would make another alteration: "who are, or have been, practical underground workmen" I want to call them "practical underground workmen" and not "practical working miners": because that has been interpreted to mean that it is only the man making up the coal at the face who is eligible to be appointed under this Section, whereas we say there are men filling other occupations in the colliery who are sometimes better qualified to make this examination, and who know more about the colliery in consequence of working in one district to-day and another district to-morrow, timber-men, for instance.

19674. (*Chairman.*) You say anyone who has been a practical worker underground ought to be eligible ?—That is what I say.

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19675 And also you would agree that they might have the power to appoint any practical miner even though he did not belong to that particular mine ?—Yes.

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19676. There has been a difference of opinion about that, and I am told there is a good deal of feeling sometimes shewn by the men appointing as they sometimes do. I understand, a man from another mine to go down their mine: and the managers say "We do not care about a man employed in another mine looking into our mine and we think that the miners ought to be confined to choosing a person who is at present at work in the particular mine." You would not so limit them ?—I would not.

19677. They are certainly not limited in that way at the present time ?—There has been a good deal of difference of opinion as to whether that is not the meaning of the Act. There was some correspondence in the South Wales District with reference to that recently.

19678–9. It seems to me on the rule that is not so. The men have a right to appoint a man from another mine, but that is only my reading of it ?—Well, there has been a good deal of correspondence upon it in reference to a particular appointment.

19680. (*Chairman.*) You say that from some cause or other the workmen do not use the power given them in Rule 38 as extensively as you think they should do. What cause do you suggest for that ?—I think one cause that the workman does not care to use the power may be that there is a probability of his being obliged to make an unfortunate report of the colliery at which he is employed, and he rather shirks doing it if he can.

19681. He does not wish to get into the bad books of the manager ?—That is so.

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19682. Have you had any experience of that ? Has any workman told you that that is the case ?—I have heard that, but I do not say recently. Perhaps within the last nine or ten years we could not cite cases of a workman being harshly dealt with in consequence of some unfavourable report ; but prior to that it was frequent that workmen complained that, after having made an unfavourable report of the colliery they were dismissed, and if not dismissed their lives were made unbearable.

19683. That was nine or ten years ago, but that state of things has altered for the better you think ?—Very much for the better I think.

19684. And the men are now pretty secure : and if they only make a truthful report of the mine, even though they may find fault with the working, and very often probably justly so, the manager will not treat them badly in consequence ?—The workmen would rather not be put in that position.

19685. Although they feel that security, they would rather not be put in that position ?—They would rather not.

19686. Notwithstanding the fact that for the last nine or ten years you know of no instance in which they have been dismissed or in any way injured by giving a true report about a mine ?—Quite so. It ought not possibly to be so, but I am told that in some districts the reason why the workmen do not use this power as frequently as they might is because of the expense. They have to pay the men for doing the work, and where men are earning low wages that is an additional reason why it is not done so often.

19687. As regards inspection under General Rule 4 by the officials of the mine, you say that is very unsatisfactory, because the management may appoint persons who have not the special qualifications necessary to perform the duties of firemen, and there is no test of fitness, and you urge a qualifying examination and certificate of competency ?—I do. I may here revert to the question of the workmen holding certificates. A large number of workmen having qualified for second-class colliery managers' certificates are still employed as ordinary colliers, while men who have taken no steps whatever to qualify themselves—theoretically, anyhow—for the position, have been appointed to these important posts, who have been working in the same district and in the same colliery.

19688. To what do you attribute that ? Surely it is to the interests of the managers to appoint the best men, and it would seem against their own interests that the best qualified persons should not be appointed ?—Yes, if they confined the duties of the firemen to what we think they should be confined, simply and solely to the continual examination of the district under their care. Their whole attention should be applied to the examination of the district, and then it would be more to the interest of the colliery owners themselves, and they would take more interest in appointing men who are qualified in that respect. But so many duties are put upon the fireman that I am afraid it is sometimes the man who has the most influence and command in getting hauliers to drive coal rapidly, and other men to do some other kind of work rapidly, who has the qualification which is looked upon with favour rather than the one who has the qualification of dealing with the safety of his district.

19689. You think the qualification looked for is the power of driving the men and making them do the most work ?—That is the one which I am afraid is chiefly looked for. In fact, I have instances within my own knowledge where a fireman whom we have thought had been an exceedingly careful fireman and a man very attentive to the examination of his district, and instructing the workmen with respect to the timbering of their places, and so on, has been taken from that district and put in another district and has been taunted in a few weeks time by the manager with the amount of coal that is got out of that district since he has been there, while the other man has come and devoted his attention to seeing that the men have sufficient trams to fill, and so on.

19690. You think they should be kept separate ?—Yes.

19691. One man to look after the inspection and the other the quantity of work done ?—Yes.

19692. On the other hand, the miners are paid for the work they do. If they do not get a certain quantity of coal they do not get their full wages ?—Certainly. I quite agree it is an important part of the management of a mine to see that the workmen get sufficient trams and timber, and so on, but I do not think it ought to be the duty of the special officials—I think their duty ought to be confined absolutely to the examination of the safety of the mine. and they ought not to have anything to do with the traffic of the men.

19693. You do not agree with the enforcement of discipline by means of fines ?—I do not.

19694. Do you think that in almost every case a man ought to be taken before the magistrates if he seriously neglects his duty ?—Yes. If he has committed a breach of discipline that necessitates any measures at all being taken, then he should be taken before the magistrates.

19695. You think that for a small breach of discipline he should be simply cautioned ?—Yes.

19696. And for anything serious taken before the magistrates ?—Yes. To put it shortly, I do not believe in the colliery office being a police-court.

19697. However, you think that some of the men themselves might prefer to be fined ?—That is undoubted, I think—otherwise it could not have been done to the extent it has.

19698. You think it would tend to a better observance of the Mines Act, and Special Rules if in the first instance it was made obligatory upon the officials to supply every workman they employ with a copy, and that printed copies dealing with particular parts should be distributed periodically ?—I think there are thousands of workmen at present who know absolutely nothing about the rules. They either do not know they are entitled to receive a copy, or, if they do know, they do not go to the office to fetch it. The provision under the present arrangement is that the owners must give a copy of the rules if the workman applies for it. I say it should be part of the engagement of the workman, when he comes to sign on, that the official signing him on should give him a copy of the rules.

19699. And if the rules are altered at any time then he should have an altered copy at once given him ?—Yes.

19700. You think it is desirable that Special Rules should be prepared by the Secretary of State after ascertaining the views of the owners and workmen, and that they should be confirmed by Parliament ?—Yes.

19701. What machinery do you suggest for ascertaining the views of the owners and workmen ?—There might be a joint conference with the coal-owners and the workmen and the inspectors.

19702. You think that before any Special Rule is propagated by the Secretary of State there should be something in the nature of a conference between the workmen and the managers, and that no Special Rule should be put before the Secretary of State or Parliament for confirmation until the men had been in some way officially consulted ?—I think it would tend to a better observance of those rules the more they were discussed before they were put into operation, and the more attention was called to them.

19703. You say you think a more regular and systematic method of timbering would reduce accidents caused from falls of roof and sides. There have been Special Rules dealing with systematic timbering and unfortunately they do not appear to have reduced that class of accident at all. What further rule do you suggest ?—I understand the rules that are in operation at present are largely in the hands of the manager of the colliery, who has to fix the maximum for the setting of any timber ; and I am afraid that in some instances the maximum has been too great.

19704. You would leave less discretion in the hands of the colliery managers ?—Even with respect to this too, a joint conference would possibly be the best means of dealing with it. If an agreement could be arrived at between the colliery manager, after consultation with the Home Office, and the workmen, as to the requirements in a particular seam, perhaps that would be the best method.

19705. That might take some time ? True, it might take some time.

19706. That would cause considerable delay and loss in the working of a colliery, I suppose, if you had to take all these opinions before you were able to timber a new seam ? —So far as regards Monmouthshire, that has been done : and I understand it was failure to agree really as to the fixing of some method, or agreeing upon some method, that ultimately led to each manager being allowed to fix his own maximum.

19707. Do you think that any General Rule could be laid down by Parliament with advantage with regard to timbering ? Have you any suggestion to make with regard to that ?—I am afraid the variety of seams and conditions makes it rather difficult for Parliament to lay down any General Rule.

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19708. Your suggestion is that it should be taken out of the hands exclusively of the managers and put into the hands of the workmen and the managers together. That they should together decide rather than the manager alone ?—And the Inspectors.

19709. You think those three parties should consult together ?—Yes.

19710. And they should put forward certain Special Rules applicable to a particular mine or particular seam, and that those rules should be observed just as other Special Rules are observed ?—Yes.

19711. You say that travelling roads, independent of the haulage roads, in which the hauling is done by machinery, should be provided, or that such haulage roads should be of sufficient width to admit of a footpath clear of the trams ?—Yes.

19712. As regards that suggestion you say you are informed that in places where they have this width at present it is rendered useless for walking by old timber, rubbish &c., being allowed to accumulate ?—That is so.

19713. Are there no Special Rules for preventing that accumulation of old timber and rubbish ?—No, only so far as the approaches to the man-holes are concerned.

19714. You might have a gangway of sufficient width between the trams and the sides for a man to walk on: and that precaution might be rendered absolutely useless by an accumulation of all sorts of rubbish ?—I am told that is so now in a good many instances.

19715. Do you suggest that there ought to be some General Rule to the effect that all gangways should be kept clear in the haulage ways ?—I think as a general rule, especially in laying out new collieries and new districts, it would be better to have a separate travelling way instead of the men having at all to walk past where the machinery is in operation. It would not be impossible anywhere, but there might be some instances in the case of collieries now at work where the expense would be enormous. I do not want to close my eyes to that—still, all haulage roads should be of sufficient width to allow the men to walk clear of the trams.

19716. Independent of the man-holes ?—Independent of the man-holes.

19717. And independent of the travelling ways ?—Yes.

19718. Suppose you had a travelling way, so that it was not the least necessary for the men to go on the haulage roads at all: would you still say you ought to have them of sufficient width as to admit of a footpath clear of the trams ?—It would still be desirable, because there would be still a certain number of men who would have to go that way.

19719. (*Dr. Haldane.*) You do not include horse haulage —you mean engine haulage ?—Yes, engine haulage.

19720. (*Chairman.*) With horse haulage you would have more men to look after the trams than in the case of engine haulage ?—There is not the same danger with the horse haulage as there is with the engine haulage.

19721. You say that where now there is a sufficient gangway to enable a man to walk between the trams and the sides, still that provision is made nugatory by the gangway being filled up with rubbish ?—Yes.

19722. Would you suggest there should be any General Rule to prohibit such a thing taking place ?—Yes.

19723. A General Rule to say for instance that all gangways where men have to walk along should be kept clear of rubbish so far as possible, or something of that sort ?—Yes, I would.

19724. There is no rule to that effect anywhere ?—I think not.

19725. General Rule 16 says "Every manhole and every place of refuge shall be constantly kept clear and no person shall place anything in any such man-hole or place of refuge." What does "every man-hole and every place of refuge shall be constantly kept clear" mean ?—A man-hole and a place of refuge is the same thing. I have already said the man-holes are kept clear under that rule.

19726. It seems to me it is practically an infringement of that rule if you block up the gangway at all: because at any moment a man may be walking along between two man-holes, and, on account of there being a lot of rubbish about, he could not get into a man-hole. Suppose he was caught an equal distance between the two man-holes and there was a lot of rubbish between the two man-holes, I should have thought that would have been a practical breach of rule 16 ?—It is very frequently so. I should say if you went down a South Wales colliery to-morrow you might find every man-hole quite clear, and the direct approach to it kept clear, but between the man-holes you will find either a heap of rubbish or possibly old timber, or some obstruction or another.

19727. (*Mr. Ratcliffe Ellis.*) Along the part which the men have to travel ?—By the side of the road.

19728. Along which the men have to travel ?—Yes—they walk between the rails.

19729. (*Dr. Haldane.*) They can get to safety provided they can get to the manhole in time ?—Yes.

19730. (*Mr. F. L. Davis.*) You do not suggest that is a general practice ?—I do not, but I say it often happens there is no obligation put upon the colliery owner to see that those accumulations are not allowed to exist—in fact, there is no rule at all providing that they should have sufficient width to start with.

19731. (*Chairman.*) But where there is sufficient width it might be quite possible that although Rule 16 was kept to the letter the men might be caught between the two man-holes and not be able to get to either, because of the accumulation of rubbish ?—Yes, simply because of the want of a little care and attention.

19732. There would be no means of his immediately stepping off the line into safety ?—Quite so. Another point which I wish to make is this; there are a large number of accidents taking place in the collieries in consequence of the breakage of shackles, that is the coupling used between the trams. The practice is that a shackle is sent into the mine and until it breaks it is used. I think there should be some periodical inspection, and that all the shackles should be taken out and put through some process to find out whether any fracture or weakening has taken place.

19733. You think there should be some testing ?—Yes.

19734. Do you know if there is any testing in the case of railway wagons ?—I do not.

19735. (*Mr. Smillie.*) There is a periodical examination, and if the shackles get worn they are taken off ?—I do not think there is even that in connection with the shackles in a colliery: they are made and sent in, and, until something happens to them, no one thinks of examining them.

19736. (*Mr. F. L. Davis.*) Are you suggesting that applies to horse haulage as well as to mechanical haulage, or more especially to mechanical haulage ?—To both haulages. There have been a number of accidents with horse haulage on steep gradients in consequence of the breaking of the shackles. A shackle may be damaged; it is the same shackle which comes down with the mechanical haulage, and the same shackle is used to take the trams into the working places, and horses have to take them up steep gradients.

19737. (*Chairman.*) Under General Rule 5 "A competent person or competent persons appointed by the owner, agent, or manager, for the purpose, shall once at least, in every 24 hours examine the state of the external parts of the machinery, the state of the guides and conductors in the shafts, and the state of the head-gear, ropes, chains, and other similar appliances"—which would include shackles ?—I am afraid it does not. That applies to the machinery in connection with the shaft itself—that is the rendering of it, anyhow.

19738. "And other similar appliances of the kind which are in actual use both above ground and below ground." You read that in connection with shafts ?—That is the rendering of it.

19739. (*Mr. Ratcliffe Ellis.*) The words are "and other similar appliances of the kind which are in actual use both above ground and below ground" ?—That might be intended to apply to it.

19740. It is more honoured in the breach than the observance ?—Honoured absolutely in the breach. I have worked nearly 20 years in a mine, and I have never known an inspection of shackles to take place.

19741. (*Chairman.*) You urge upon the Commission the necessity of an exhaustive inquiry into the best method of dealing with coal dust with the view of minimising the extent of any explosion. We are doing that, I may say. You say you do not wish to say anything about watering and other scientific methods, but you suggest that a closed tram, filled only to the level, would considerably reduce the amount of dust made by the transit of coal. We have had a good deal of evidence about those trams, and, I think, no one has suggested that it would be practicable to have trams with closed tops, although many persons suggested you should have all four sides closed, so that no dust could

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escape ?—I suggest that the coal should not be packed above the level of the tram. The practice in South Wales is to pack the coal above the level of the tram altogether. We have the coal piled up a foot, half a yard and two feet above the level of the tram.

19742. You think that results in a considerable quantity of dust being scattered over the haulage road ?—It must do, I think.

19743. And you think that might be easily avoided without any great expense ?—Yes ; it is only a question of improvement in the type of tram. They should get a tram high enough to carry the coal closed sides and end.

19744. And made as high as the coal now goes up ?—Yes.

19745. You say a number of collieries make no provision for preventing the dust from the surface screens going down the shaft ?—Yes.

19746. You suggest such provision should be made ?—I do not know what the engineering difficulty is about it, but certainly, the colliery screens, in some instances, are situate very close to the mouth of the down-cast shaft, and some of our coals being very dry, clouds of dust appear every time a tram is tipped, and a big percentage of that must find its way down the shaft. As I say, I do not know what the engineering difficulty is, but I am told that steps are taken at some collieries to prevent this dust going down.

19747. We have had a good deal of evidence on that point. One suggestion is that on the opening of new pits the surface screens should not be placed near the shaft, but should be some distance off ; and where they must be near the pit, then some system of collecting the dust by currents of air, or something of that sort, should be resorted to, so that it does not find its way down the pit ?—I think so.

19748. You say that the rule with regard to safety lamps requires alteration. Would you suggest that the type of lamp should be tested, say, at headquarters ?—I think so.

19749. And the quality of the oil ?—Yes. I may say I have read several times the Report of the Commission which reported, I think, in 1886. There were very many important recommendations by that Commission which have not been attended to, I think. If I remember rightly there was this one ; the Commission recommended a permanent investigating Department, or a department for research with respect to these matters. I may not be accurately quoting what they recommended, but they certainly recommended something which has never been attempted or done, so far as I know, since that Report was issued ; and we are still going on allowing each manager to select his own type of lamp.

19750. In some mines they have a type of lamp that permits the workman to put the flame up and down, and in some mines that is prohibited. Do you think there is any danger in a lamp that enables a workman to put the flame up ?—Yes ; I think it is better that he should be deprived of any opportunity of interfering with it at all—if you have a lamp which can as easily serve his purpose.

19751. (*Dr. Haldane.*) He cannot test for gas then ?—We say the ordinary workman ought not to test for gas at all.

19752. (*Chairman.*) That should be restricted to the persons with first-class certificates ?—No, to the firemen—those are the men I attach the greatest importance to in a colliery.

19753. I thought you said they should have a first or second-class certificate ?—Yes, I did ; and they should have fewer duties to attend to than they have at present, and be confined to examining for gas and assisting the workmen.

19754. (*Mr. F. L. Davis.*) Do you suggest a lamp that does not need trimming ?—Yes, if you can get one, and, I think, there are some in use at present

19755. But not capable of lasting the whole time the man works, I think ?—Perhaps not.

19756. A large number trim their own lamps ?—Yes, they have a kind of wire pricker going up through the body of the lamp.

19757. (*Chairman.*) If he likes he can push it up ?—Yes, he can push it up.

19758. (*Mr. F. L. Davis.*) What is your objection to it ? Is it safety ? This is supposed to be a safety lamp. What is the objection to putting the flame up a little ?—That is a point which I did not suggest myself.

19759. Do you think there is any danger in it ?—Of course there is the possibility of a workman recklessly pushing it up and getting a big flame, but I do not know that there is any very great danger.

19760. (*Mr. Smillie.*) A person of very little experience with gas or safety lamps, and who did not know the danger, could put up that flame to a point that would render the lamp dangerous ?—Yes, if he was working in gas. Of course a workman immediately finds out if he gets too big a flame in the lamp because it smokes and the light is consequently affected.

19761. (*Chairman.*) You say you would insist upon the use of safety lamps in all ventilating districts where inflammable gas is found, and that safety lamps and naked lights should not be permitted in the same ventilating district ?—Yes. The rule at present is that no naked light should be used between the points in the ventilating district where it is necessary to use safety lamps and the return airway. I think naked lights should not be used at all in that ventilating district.

19762. You think there ought to be some General Rule to that effect ?—A General Rule. If it is necessary to use a safety lamp at all in any separate ventilating district, then I do not think naked lights should be permitted in any portion of that district.

19763. You think that might be made a General Rule to apply all over the country ?—Yes.

19764. And you say that firemen should report the presence of gas if found in their inspection during the working shift. Is that not so now ?—No. I understand he is only compelled to make a report of his inspection made before the working shift.

19765. Would he not, as a matter of fact, if he found gas at any time, report it ?—I think not.

19766. He is not obliged to ?—He is not obliged to.

19767. You think he should be obliged to ?—Yes.

19768. That might be made a General Rule ?—Yes, it might.

19769. You think that proper ambulance appliances, splints, bandages, stretchers, &c., should be kept in each district in the mine and not "at the mine." What do you mean by "in the mine" ? Do you mean down the pit ?—Yes, down the pit. I see no difficulty in each large working district keeping stretchers, bandages, and splints, which might not only considerably relieve an injured workman immediately, but might in some instances save life, instead of having to send out to the top of the pit as they have at present. The general interpretation put upon General Rule 34 is that, if they keep in the colliery office at the top of the shaft, two miles away often from where the workman might be injured, sufficient splints, bandages, and stretchers, they have complied with the Rule. The expense would not be great, and the opportunity of relieving suffering, if not saving life, by having the appliances immediately at hand, I think, is very important indeed.

19770. (*Mr. F. L. Davis.*) You mean just keep them stored at the bottom of the pit ?—Some place in the pit. I do not think there would be any difficulty in keeping a suitable iron box in each district in the pit.

19771. (*Chairman.*) The words are "at the mine." The mine might include a number of pits ?—It might, but I think the interpretation put is that they must have these appliances at the office at the top of each pit.

19772. You would say at the bottom of each pit instead of at the top ?—Yes. I do not mean at the bottom of the shaft, because that is only a matter of a few hundred yards from the top, and not much saving of time ; I mean actually near the working face—near at hand.

19773. (*Mr. Ratcliffe Ellis.*) The Rule requires that they should be ready for immediate use ?—Yes, but that is the interpretation. Speaking as an ambulance medallist, a man, by having proper splints or appliances to make a proper tourniquet, might save another man's life.

19774. They ought to be required to keep them in some place where they could be kept in order ?—Yes, that is an important point.

19775. (*Chairman.*) It would be rather a trap if they were kept in places where they were apt to be neglected and people said, "Here they are close by and we can get at them at any time," but when the necessity arose they found they were not in proper working order ?—I would relieve the fireman of some duties, but I think there would be no difficulty in putting this duty upon him : that he should examine these every day in the same way as he would examine his district.

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19776. You say that provision should be made for dealing with an explosion at every colliery, and every appliance possible to assist rescue work kept in readiness, and workmen trained for the purpose. We are all agreed there, but I do not know whether you have any detailed views you would like to put before us upon that?—No, I have not, other than this: I want to say that I believe the workmen generally now are beginning to feel that they have been criminally neglected in this respect. You get a big explosion, as we have had in South Wales, where a couple of hundred men have been killed; there is consternation at the colliery because no one has any instructions at all what to do in an emergency. There are no appliances of any kind; that is a simple precaution which might have prevented some of the men losing their lives who have gone in immediately after an explosion. I am not prepared to say what appliances there are which might be used at present, but I do desire to say this, that all these kind of mechanical arrangements are only perfected by experiments. Take the case of the appliances which we have for dealing with fires in a large town. What would happen if that took place which always takes place in the case of miners where there is no apparatus and where they say, "There is nothing we know of that can be of any service." That is the attitude which has been taken up.

19777. Attention is being seriously called to this matter of rescue appliances?—I hope this Commission will treat it as one of the most important features that they should give attention to. I believe, to start with, that it would be possible to train all the men working at the top of a large colliery. If you have a large place of entertainment, generally the attendants are trained as to what they are to do in the case of a fire. Here you have a mine with, say, a couple of thousand men going down every day and with the possibility of an explosion, but there is not a word of instruction of any kind, either verbal or printed, or anything else, given to anyone as to what they are to do if an explosion takes place.

19778-9. You think there might be lectures given?—Yes, and I think that every one of the large number of men employed at the top of the colliery—the banker, the engineman, the smiths and carpenters, and other practical men who are there—might all be trained so as to know his duty when an explosion takes place. I feel very strongly about this, I must say. I have said so publicly on platforms, and I have said so in Parliament. I think the mining population has been criminally neglected, and that absolutely nothing has been done. Take the collieries we have recently had explosions at. At one, a recent big explosion, I put it to the colliery proprietor himself, "Has there been anything done at your colliery which was not done before the explosion with respect to teaching men at the top of the pit what to do in case another explosion took place?" and he had to admit that when the workmen went in they forgot about it—everybody forgets about it until another explosion takes place. I was at the top of a colliery within half an hour after an explosion took place, and the manager, poor fellow, of course he had rushed down; we have no complaint to make in that respect. The manager and the officials generally risk their lives instantaneously, and it is a reckless risk of life, and often a useless risk of life. A large number of practical people were there ready to go down to see whether it was possible to save life or not, but there was no one at the top of the colliery to take charge. The manager had rushed down the pit, and nobody else was allowed to go, and for two hours nobody was allowed to go down the colliery to see whether anyone might be saved or not. Personally, I feel very strongly if a beginning was made, no matter how simple it was, it would be a good thing, and by experience we should gain in this matter, as we have gained in other matters. Of course, if people dealt with torpedoes, for instance, or submarine boats, in the same manner as we are dealing with appliances for entering a mine after an explosion, we should have had no submarine boats. It is because they hung on to the faintest hope of being able to do this, and experimented time after time, that ultimately they were able to produce a boat to go down below the surface of the water; and I say that is the attitude we should take up with this important industry and the great risk to life which is caused by these explosions. I do not wish to say any more about it.

19780. We have been going into this question of rescue apparatus very carefully?—What I consider equally important is that something should be done to teach all concerned what they are to do if an explosion takes place, because they are responsible at the top of the colliery.

19781. With regard to investigation into mine accidents, you do not consider the present system of coroners' enquiries satisfactory, and in all cases of serious accidents you think that enquiry should be supplemented by the investigation authorised under Section 45 of the Act, which says that where it appears that a formal investigation of any explosion or accident is expedient, the Secretary of State may direct such investigation to be held. Do you suggest that the Secretary of State should have it in his power either to grant or to veto a second enquiry, or do you think that there ought to be some power given to a certain number of men to insist upon a further investigation irrespective of the veto of the Home Secretary?—Yes, I do.

19782. If, for instance, a certain number of workmen in a mine were to demand further investigation, you think that investigation should be granted, as a matter of right?—Even preferable to that, I think, if a number of workmen are killed, as a matter of course, this investigation should take place.

19783. Does not the coroner's enquiry generally bring out all the facts of the case?—No, I think not—well, the facts of the case, possibly, as attendant upon that particular accident, but there are often cases when questions are not permitted by the coroner because he does not see the relevancy to that particular accident which practical men can see, and which, we think, would be permitted under some other court.

19784. Have you yourself had any experience of coroners' enquiries?—Yes.

19785. Have you attended many?—I have attended a large number.

19786. Your opinion is that in some of those cases, at all events, some fresh facts might have been elicited by a second enquiry?—Yes, and in some of those cases, in my opinion—of course, I may be wrong—I have felt the coroner has not permitted the questions to be put that ought to have been put.

19787. You say that from your own experience?—Yes, and I think, with regard to the enquiries we have had in two recent explosions, to name two, the Elba and the Genwen—at Genwen the manager has since been prosecuted by the Home Office, I understand, and has been fined £20 for one of the most appalling neglects of duty it is possible for a colliery manager to be guilty of. I leave that to the Commission to see from the evidence at the coroner's enquiry even.

19788. (*Mr. F. L. Davis.*) What was the breach of duty?—There were numbers of them. I do not remember them now; I have the particulars here, but I thought you might see them for yourself.

19789. (*Chairman.*) How would the case have been strengthened against him by further enquiry? You had this enquiry which brought out that he had been guilty of neglect of duty. Supposing that there had been a further enquiry, what more would you have got out in that case?—I think the Court should have some power of suspending his certificate.

19790. That is another matter?—Here he has been fined £20, and he continues to be a manager.

19791. That has nothing to do with the second enquiry. The point at issue is whether a second enquiry is necessary in order to elicit useful facts which are not elicited at the coroner's inquest?—Perhaps not, in that particular case.

19792. Then you proceed to give an instance which it seems to me does not bear out your contention. The instance you give is where a manager was convicted of a very grave offence. It does not appear, from that instance you give, that any further facts would have been elicited by a second enquiry. You acknowledge the first enquiry did bring out the circumstance that he was guilty of a neglect of duty?—No doubt in that case it did.

19793. But you still adhere to your opinion, you do consider that at coroners' inquests the facts are not invariably fully investigated, and that in some cases, at all events, and you say, in all cases where a very serious accident occurs, it would be desirable to have a second enquiry under which a more complete investigation could take place?—I do.

19794. You say that you know nothing of ankylostomiasis in South Wales or Monmouthshire, but that you think there is room for improvement in the sanitary condition of our mines in the interest of the general health of the miners?—Yes.

19795. What have you to say with regard to that?—I think everybody is allowed to go largely as they please with respect to this matter, and, I think, that some instructions

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may be issued to the miners generally. I do not think there is very much cause for complaint.

19796. The miners, themselves, would rather resent any very elaborate system of sanitary conveniences underground ?—I am afraid they would.

19797. You are afraid they would not make use of them ?—Yes.

19798. You do not lay very much stress on it ?—No.

19799. (*Mr. Cunynghame.*) I suppose you would not propose that there should be an enquiry in every case, or nearly every case, where a coroner's inquest had been held already. I will put it this way. What are the fatal accidents per annum, 700 or 800 ?—About 1,100.

19800. It would not be necessary to hold a separate enquiry in the vast majority of those accidents, for instance, where a man is killed by the improper setting of a piece of timber, or something of that sort. You would admit that the whole thing would be brought out before the coroner's jury with the inspector to help him, and all parties represented ?—Perhaps it is the explosions more especially, that I had in my mind. I think, no matter how many were killed, whether they were a few or many, that we should have, after an explosion, a special enquiry.

19801. Are you acquainted with any case, except one that occurred last year, where a subsequent enquiry, after the coroner's inquest, would have really thrown any additional light on the facts ? Can you name any case which you have in your mind ? The one last year resulted in the appointment of this very Commission, I mean the one in June ?—Yes.

19802. Apart from that, do you remember any case ?—There was one that we felt very strongly about at the time, and I think we approached the Home Office by deputation, met the Home Secretary, and pleaded for an enquiry. I have not the particulars fresh in my memory at the moment, but I think it is the Abertysswg, the MacLaren Pit in the Rhymney Valley.

19803. I should have liked to have had particulars of that.—I ought to say perhaps one of the Commissioners, Mr. Smillie, was present at that enquiry, and would be able to give the Commission more particulars than I can remember at the moment.

19804. If you were to give a right to a subsequent enquiry wherever a man had been killed, it would often be asked for by people who would say, "Let us have the enquiry ; we have not to pay for any part of it, and we may as well have it and see what will come of it." Do you not think it would lead to an amount of useless expense ? The revenue of the country is not illimitable, and these enquiries, if held by efficient men, cost a great deal of money before they are done with.—If they ultimately result in lessening the number of accidents it would be money well spent.

19805. I quite agree, but you are aware that in these cases we have the Report of a barrister who is sent down specially to look into the case, and also the Report of an inspector who goes thoroughly into the reasons. It is gone into by both of them. I was asking, rather, can you point to any case—I fail to see them in fact—where these men between them have not got to the bottom of it ?—I think we were especially dissatisfied with this Abertysswg case.

19806. Perhaps your complaint would be rather this ; you put it quite frankly: you do not think that the Home Office has exercised sufficiently the powers given under General Rule 45, and you think that if those powers were more exercised in future it would content you. It really comes to that, does it not ?—And, if you will allow me to say so, that the Home Office should give more consideration to a generally-expressed desire. Surely for men who have to risk their lives in these collieries the expenditure of a few pounds upon an enquiry ought not to stand in the way.

19807. If it was for no other purpose than to give contentment and satisfaction to a number of men whose lives may be in jeopardy, that would be a fair reason for holding a certain number of enquiries, at all events. That is your point ?—Yes.

19808. I suppose it would come to this : if the Home Office acted as you wish, there would not be a great number of these enquiries after all which would be desired ?—No.

19809. There has not been any request for an enquiry in more than a few cases ?—Probably not.

19810. Probably, if something were done in the direction of holding a few enquiries that would content you and be all that you want ?—It might.

19811. In the case of asking for an enquiry, you would give some discretion to someone not to have utterly useless enquiries asked for. May there not be persons who are fond of enquiries and who would ask for them in most of the 1,100 cases ?—There may be.

(*Mr. Enoch Edwards.*) In some cases the Miners' Federation asked, and they were refused.

19812. (*Mr. Cunynghame.*) I see Mr. Richards' point. I think I put it to you, in your way of thinking, fairly ?—I would not like to say that we want a special enquiry after every single accident or loss of life, as you put it. In some cases the Coroner's Court gets at all the facts possible, and I would not think of having an enquiry of that kind in such a case as that. What the Miners' Federation feel perhaps rather aggrieved about, rightly or wrongly, is this : notwithstanding the opinion of the Home Office that all the facts have been brought out, they have felt upon several occasions that there ought to have been a special enquiry.

19813. To put it plainly, it is not so much the law you are complaining of as laid down here, but that you think it might have been more liberally interpreted by the Home Office ?—Yes, I think so.

19814. That is plainly what it comes to, does it not ? Now as to the third class of inspectors you are speaking of, those would be what one might call working-men inspectors ?—Yes ; they who have had some extensive experience as practical working men.

19815. I mean you desire to see some men of the class of the actual hewer or drawer, and so on, men actually engaged in working as distinguished from officials appointed ?—Yes.

19816. I suppose that there are duties besides coal mines that they might be employed in. I will take quarries, for instance. Are you acquainted with quarries at all ?—No, I know nothing about quarries.

19817. Now the question of fines has often given one a great deal of difficulty. Supposing one were to enact that a man could always have an appeal if he wished to do so ?—I suppose this fine really cannot be made at present without his consent.

19818. That is the law ; there must be consent ?—Yes.

19819. You think that consent is not enough ? You think that the law is not in a proper state as it stands ?—I do not think, even with the consent of the workmen, that the manager ought to be permitted to fine at all.

19820. On the other hand, particularly in the case of younger miners who are beginning, where you have fellows who do careless things and endanger the lives of other people, at present in order to punish them you would have to take them before the court and make them lose a day's work, and also to a certain extent endanger the mine by taking away the firemen and other persons, who are wanted to give evidence against them. The other is a clear system, and where the boy admits he is in fault, he says, "I know it," and there is an end of it : but it seems to me to be a complicated system to take him away to the magistrate's court. Could you suggest some alternative ?—No, I am afraid I could not. I realise the difficulty of that, but still simply fining him a few shillings would not have the same effect in making him more cautious in the future than if he had to go through that process.

19821. You have another plan. You can suspend him for a day, but that does not seem to be a very good remedy because it only sends him loafing about doing nothing for that day ?—And it is open to very much abuse. I should not recommend that. It may be very convenient for a colliery manager to suspend a workman for a day or more, or for two or three days.

19822. It always appeared to me, without pretending to know nearly as much about it as practical miners, that the suspension in the case of young miners was not a very good thing. It prevented him earning his wages, and sent him about in idleness, and it seemed to me that that is rather a pity ?—I do not think that I can suggest any method.

19823. It is the manager being the judge of his own cause which is the great point that you object to ?—Yes.

(*Mr. F. L. Davis.*) I think the suspension is neither good for the men nor good for the management.

19824. (*Mr. Cunynghame.*) I was rather putting to the witness that point. It sends the men unwilling about on the hills instead of doing their work ?—Yes.

19825. Supposing you had a rule of this kind, firstly, that no fine could be inflicted except for some act which endangered the safety of his fellows at work ; and, secondly, that the whole proceeds of the fine should always go to a fund by which the workmen were in some way benefited, that it should not go to the masters at all. Would that have any effect ?—As far as I know, in cases that have come under my notice, I do not think that the masters have ever appropriated the fines for their own purpose.

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19826. In France there is an extensive system of fining, but as the money always goes to the men the objection is removed to a large extent on that account. It is not, therefore, like the management being a judge in their own cause. That you would not consider a sufficient answer ? —No.

19827. (*Mr. Enoch Edwards.*) Mr. Richards would not like to suggest that now the employers appropriate part of the fines ?—No, I do not think they do ; in fact, I know they do not in South Wales.

19828. (*Mr. Cunynghame.*) I put the question to elicit the witness's views. There is another point which has puzzled us extremely, and I wish you to throw light upon it : that is the question of the use of safety lamps where inflammable gas has been found. There is difficulty in the interpretation of those words, and they present an immense difficulty, because you must give some notion of a quantity. Is it not true that there is not a mine in the Kingdom where, if you go to find gas you cannot find it at once, in the same way as you can find dust in this room if you look for it ? I suppose you mean a substantial quantity ?—I am afraid that I should come into conflict both with the workmen and the owners. My view of it is this : I think that safety lamps should become pretty general in all our mines. I know that a large number of workmen object, and lots of owners, but personally I should not wait for any large quantity of gas, or anything else. I think, especially in our deep seams, it is best to take every precaution.

19829. On the other hand, I have heard it said that putting in safety lamps in mines that do not need them, although you may get a greater immunity from explosions, causes more loss of life from falls ?—I do not think that is so.

19830. Do you think the men can work as well with a safety lamp as they can with a naked light ?—I must be careful ; I do not say that either, because we generally look for some additional remuneration in South Wales when they change from naked lights to safety lamps.

19831. At all events, that is an argument used on the other side ?—I might say that while it may not increase the danger, it certainly decreases the man's power of earning. A man cannot work as well with a dim light as an open light. That is a matter of common sense.

19832-3. You are of opinion that there are a substantial number of mines in the kingdom worked with naked lights that ought to have safety lamps ?—I cannot say that from my own experience. There have been instances where the inspectors have felt strongly that lamps should be put in, and both owners and workmen have objected. I do not think that is a satisfactory state of things.

19834-5. The inspectors have told us that the great difficulty they find is in interpreting the Act ?—For their own satisfaction.

19836. I think they desire a clearer interpretation of the rule. I think I should be justified in saying that there are not many cases where an inspector seriously thought that safety lamps ought to be in a mine and reported it and did not get them in. You do not put it forward that there are a number of mines that ought to have safety lamps at present which have not got them ?—No.

19837. It is a very important point ?—I cannot say that ; I do not know, really.

19838. Then about the sanitary state of the mines, apart from ankylostomiasis, is it bad ? Is there improvement wanted ?—I do not think it is bad. In this respect very little attention has been given to it, and possibly it would be as well if the under officials had this present to their minds. I do not think that they have ever had this present to their minds.

19839. In all the mines I have been down I have seen pools of water in the road, and it would have made much easier walking if they had been cleaned up better, but I have not come across foul odour, or things of that sort ? —There are occasions sometimes where old working places have been used and perhaps rubbish not taken in as frequently as it might have been.

19840. Where excrement lies about, which, of course, is unhealthy ?—Yes.

19841. Now about timbering, could you give us any help in that respect as to what we could do ? You would suggest the spragging distance, which is to be less than 6 ft., should be laid down by Special Rule ?—I am not referring to spragging ; spragging is laid down.

19842. There are two rules about it, one a General Rule in the Act and the other a Special Rule. That is universal now over England. In the Act it says the distance shall be 6 ft. ?—Not more than 6 ft.

19843. Or such less distance as shall be laid down by the manager ?—I do not know that we can improve very much upon that. The timbering of the roof is the one I had more especially in my mind. There may be some uniform distance for roof timbering.

19844. I suppose we may expect really that the accidents which take place from want of proper spragging at all events will diminish as the men gradually become more careful—as education spreads ?—I do not know that the accidents are very numerous now from want of spragging.

19845. I am afraid they are ?—I think not. They are from falls of roof chiefly. I think the spragging regulation has reduced the number of accidents from falls of coal.

19846. I am very glad to hear so, as I personally have had a lot of trouble with it. As years go on do you agree that there is greater care taken, and an improvement in the care the miner takes of his life compared with 15 years ago ?—Yes, I think that there is considerable improvement.

19847. (*Mr. Ratcliffe Ellis.*) What is your view of the duty of an inspector ; what ought he to do in your view ?—He ought to see that all the provisions of the Coal Mines Regulation Act are observed at the collieries which are under his care. That is his special duty.

19848. That he should see that the provisions of the Act are carried out ?—Yes.

19849. Take a colliery : in order to fully see that he would have to be at the colliery every day, I suppose ?—No—well, of course the actual state of the colliery changes every day.

19850. The Coal Mines Regulation Act has to be observed every day, and therefore if he must fully see that it is carried out he would have always to be on the spot ?—Well, in every detail, yes, that must be so.

19851. That is impossible ?—Yes.

19852. Where would the next step be : how near would you expect him to see that the rules in the Act of Parliament are carried out every day in every mine ?—He could not be every day at the colliery. How often should he be there ?—I do not want to say ; in fact I do not think I will say other than that the times he is there are certainly insufficient.

19853. I want to get your view as to how frequently you consider it necessary that an inspector should visit a colliery to see what I agree with you is his duty, that the provisions of the Act are being carried out ?—I do not want to give any definite special period. All I want to say is that inspection once in 12 months as at present, sometimes once in two years, and then only a superficial examination or inspection of the collieries is certainly very unsatisfactory.

19854. You will not commit yourself to an opinion as to how often you think the inspector ought to be there. Your view is that he is not there often enough ?—No.

19855. Do you think that has been prejudicial to safety ? —Yes, I think so.

19856. Have you anything except an opinion upon that subject ; have you any statistics ?—No.

19857. You have no comparison of the results at a frequently inspected pit and one where there is only inspection once a year ?—I do not know a frequently inspected pit, to start with.

19858. You think more frequent inspection would result in having less accidents ?—It must, I think. When inspections are made it is generally found that the inspector has to call attention to something to be done here, or to something not having been done there.

19859. Do you think that is so, that he always has to find fault after an inspection ?—I do not say always. I said "frequently."

19860. What is your view as to the qualifications for an inspector ?—I do not know that I find any fault with the qualifications of the present inspectors.

19861. You think they are about as satisfactorily qualified as can be ?—I think so.

19862. Do you know any inspector at present who has worked at the face ?—No, I cannot say.

19863. Why do you think that there should be some change made in favour of the men who have worked at the face being inspectors if you are satisfied with the

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present qualifications?—They would make these more frequent and general inspections.

19864. That is a question of the number. I am speaking for the moment of the qualification. If you are satisfied with the present qualifications, why change them by excluding from the class from which these inspectors are drawn men who have not worked at the face?—We are not excluding them from the chief inspectorship or the assistant inspectorship.

19865. Why exclude them from any?—Because I am afraid our class has been excluded.

19866. That is why you would exclude the others. Is that the way to make for efficiency? Two wrongs do not make a right?—No, of course they do not.

19867. Can you give any other reason, except that workmen have been excluded, why they should be included now to the exclusion of the class which you yourself say is quite satisfactory?—Well, I say that I find no fault with the present qualifications of the inspectors. A practical knowledge of the working of a mine must be an additional qualification.

19868. If the present class of inspectors is good enough—I agree if you can improve it there is no harm in doing that, but if it is good enough you would not wish to exclude that class from any class of inspectorship?—Perhaps not from a purely competitive examination.

19869. Now with reference to the examination, do you think that it would in practice work that everybody who chose should submit himself for examination?—Why not?

19870. There might be a very large number to be examined?—That may be so, but it would very soon become known that there was a standard of efficiency.

19871. You do not like the present system of nomination and think that it might be improved?—I do not like the present system of nomination.

19872. Are you right in thinking that there are a large number of men working as colliers who have certificates?—Yes, absolutely.

19873. Have you any idea of the number of certificates granted each year?—No.

19874. For the five years ending 1905 there were 2,580 certificates granted, that is 945 first class and 1,635 second class. That is at the rate of about 500 a year?—Yes.

19875-8. Roughly speaking, there are about 3,000 collieries most of which have certificated managers. It does not leave a very large number out of 500 each year to be distributed amongst the men who are working as colliers?—500 each year would be a considerable number. There are a large number of men that I know personally who have certificates.

(*Mr. Enoch Edwards.*) That will not be disputed.

19879. (*Mr. Ratcliffe Ellis.*) It is a very good thing if it is so, and I am very glad to hear it?—I have two brothers who had it and they failed to get any appointment. Fortunately they got much more lucrative appointments at the end, but they were working at the collieries and got under-managers' certificates and were obliged to look for other work because they were kept on as colliers.

19880. While I feel that it is somewhat hard that those who have equipped themselves for a managership should not get one, still that is not your object in asking that the under-managers should have certificates, to find positions for anybody?—I was not suggesting the position of managers for these, firemen I was suggesting——

19881. You think that you would have more competent men if selected from this particular class?—Quite.

19882. Do you know how many inspectors there are now?—No, I could not say right off.

19883. I am told there are 38. Have you in your mind the number you would increase that to?—It is a very easy calculation, one to 10,000 men.

19884. That is about 80. With reference to inspection under General Rule 38 you think the reason the men do not avail themselves more frequently of this rule is because there is some sort of fear that consequences might ensue to their detriment if they made an unfavourable report?—I do not want to put that as being very general; I say that may operate in some cases.

19885. I suppose the collier is pretty much the same all over the Kingdom?—I suppose he is.

19886. In some districts this rule is very largely availed of?—Yes.

19887. In the North of England particularly?—I did not know that.

19888. You can take it from me that in some districts it is very considerably used. That feeling does not appear to exist there. Do you really think that has anything to do with it?—It has something to do with it.

19889. Ten years ago I think you said it might have?—It had a considerable amount to do with it ten years ago.

19890. I do not think you will say that it has as much to do with it now. I will not press you about it?—I am not going to say how much, but it has something to do with it.

19891. Then with regard to expense, is not that a deterrent?—Yes, in some cases.

19892. If this rule is to be enforced how would you provide for that to be paid?—I do not know that there is anybody to pay it unless we get the Treasury to do so.

(*Mr. Smillie.*) The Treasury does it in France.

19893. (*Mr. Ratcliffe Ellis.*) You do not suggest that the employer should pay that?—No.

19894. Did you ever hear an objection made to it because it was too hard work?—Yes, I have heard that too.

19895. Can you see how that can be removed?—Increase the number.

19896. It is the workmen?—They may increase their number and take smaller districts.

19897. There is nothing to prevent them doing that now?—The expense would be greater.

19898. It is hard work?—Yes, it is a change of work. It is taking a man out of his ordinary employment and giving him moderately hard work. If it is a different class of work to which he has been accustomed it makes it hard for him.

19899. The object I suggest to you is that the men employed at the colliery should make an inspection of the conditions under which they work themselves and that they can make it more satisfactorily than an outsider?—I thought the object was that the workmen should be allowed to appoint their own inspectors.

19900. You suggest that the workmen employed at the colliery may not like to do it because of being discharged. If they bring two workmen from another pit would they not be at the same disadvantage?—Not under the same owner.

19901. No, but at the colliery at which they worked? Not necessarily. Managers are human like other people, and one manager does not agree with another.

19902. Workmen can be brought from another colliery now who are actual practical mine workers to examine this colliery. Why do you want the examination to be made by a man who is not now a practical worker, but who has been a practical worker?—Because he would be relieved of this——

19903. Is it the checkweigher you mean you desire to make the examination?—I do not think that there could be any great objection to the checkweigher doing it. He would be a free man and would give an impartial report.

19904. You want this rule extended not only that the practical workers should be able to make an examination as to the conditions under which they work, but that somebody else who is not a practical miner but who in some past period of his life may have been a practical miner should make that inspection too?—I should not like to say who during some past period of his life had been.

19905. Is there any halfway house?—I think the workmen would be wise enough in their selection.

19906. You must remember the owner wants some protection. This man would be sent down the pit under no responsibility; mines inspectors are given very carefully guarded instructions and directions, but this man would be absolutely a free lance?—If he knew nothing about mining his report would be of very little value or not do very much damage to the colliery owner.

19907. Is it your view that this would secure an inspection where an inspection might not now be made because the men are afraid if they gave a bad report that it might be to their detriment?—Yes.

19908. During the last 10 years you have never heard of a case in which that has been put forward?—No, I have not.

19909. You have no other ground to suggest than that?—No.

19910. In General Rule 4 you think the examinations now are not satisfactorily made?—I do.

19911. Rather, I gather, because the firemen have too much to do than that they were not competent to make the

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examination ?—One never likes to call attention to the incompetency of anybody, but there is this fact that they have no test of their competency other than the managers' general opinion of them.

19912. What has a fireman to do in the examination ? He has to see if there is any gas ; see to the condition of the roof and sides ?—Yes.

19913. What very skilled scientific knowledge is necessary for that ?—If he finds gas he has to take steps to get it removed.

19914. He has to fence it off ?—Not only that ; he has to fence it off, and part of his duty is that he has to get it removed. There is a possibility of an unskilled man upsetting the whole ventilating system of the colliery in his attempt to get this bit of gas removed unless he knew his business and the ventilating system upon which he is operating.

19915. Have you ever known a case in which that has actually happened ?—I cannot say that it has come within my own personal observation or experience, but I have known of it, had it told me, that firemen who have gone to remove gas have driven it on to men working in other districts.

19916. You would not put it forward that the present class of firemen, as a class, are incompetent men ?—No, I would not.

19917. Your objection rather is that their duties are too great, that they have to do work which is inconsistent with their making a thorough inspection ?—That is one of my objections, and the other, which is more important, is that the workmen should have more confidence in the firemen than even the manager or the owners, and, I think, in order that the workmen should have confidence in this class of official there should be some test of their competency.

19918. You think he would be more competent if he had to have a certificate ?—If he had to pass an examination.

19919. Now I want to ask you about fines. You have said that you are aware that a man cannot be fined except with his consent ?—I understand so.

19920. You know also that a register of these fines has to be kept under the Truck Act ?—Yes.

19921. And that the inspector has an opportunity of seeing this register ?—Yes.

19922. If the fine is excessive or the requirements of the Truck Act have not been complied with, or there has been a breach of the Truck Act, the inspector can prosecute the owner ?—I suppose that is so.

19923. And that the man who has been fined, if fined an excessive amount, can recover from the person who has fined him, the excess ?—Yes.

19924. Do you think that is a sufficient protection against any injustice ?—I am not complaining so much that there has been an injustice inflicted upon the workmen by these fines. What I say is, I do not think they are a satisfactory method of administering the discipline of a mine.

19925. Have you had any opportunity of comparing the discipline of collieries where fines are inflicted and where fines are not inflicted ?—No.

19926. If it is a desirable way of doing it you have no further precautions to suggest ?—No.

19927. With reference to the rules, you think that a copy should be given to each workman, whether he wants it or not ?—Yes, I think so, when he is employed.

19928. You think if he got that he would read it ?—Undoubtedly, some would do so.

19929. Now about the establishment of special rules : I should like to know exactly what your scheme is for the establishment of special rules ?—I quite see the necessity of some consultation between the owners and workmen and the Home Office for these rules, but I do not think that even the owners and workmen should have the powers in their own hand of agreeing to what is practically an Act of Parliament after all——

19930. Will you tell me your objection to the present system ?—The chief objection that we have had in the past to the present system is that if we failed to agree we had to go to arbitration, and we had no *locus standi* at the arbitration.

19931. If a system could be devised by which you could get a *locus standi* at the arbitration, would that meet with your approval ?—I would prefer their being sanctioned by Parliament. I believe it would be better if the whole thing was subject to discussion in Parliament—it might not be discussed, but subject to discussion, if necessary, before they become operative.

19932. May I suggest to you this scheme for your consideration, that the right to propose a rule should be as it is now, either with the owner or with the Home Office ; that if the owner propose a rule, that this should be advertised and any person interested might have a right to object to it, sending his objection to the Home Office, and then that the arbitration should not be as it is now, each person appointing an arbitrator, but a single arbitrator to be agreed upon, if possible, or, if not, to be appointed by one of the judges of the High Court ?—Agreed upon by whom ?

19933. By the parties interested. I am bringing the men in at the time that the rule is advertised ?—You only bring the men in in the form of objectors to the rule.

19934. Yes ?—I do not think that is sufficient.

19935. Let me put this difficulty to you : suppose an owner proposes a rule, then is he not to be allowed, according to your scheme, to send that on to the Home Office unless the men agree to it ?—He may be allowed to send it on to the Home Office, certainly, but I do not think——

19936. If he can send it on to the Home Office, whether the men agree to it or not, what is the use of discussing it with the men, and if the men are to have a right of veto it would mean no rule could be proposed except what the men accept ?—Under my suggestion Parliament only should have the right to veto.

19937. How is it to get to Parliament ?—The Home Office to propose the rule : then they consult——

19938. Do you think it is a satisfactory way, that we should have no special rules unless they are discussed in the House of Commons and then sanctioned by Parliament ?—I think so.

19939. You think so ?—I do.

19940. Supposing an owner wished to propose a rule you would allow him to do it as he can do it now, by sending it to the inspector ?—Yes.

19941. What is the next step ?—The Home Office would ascertain the views of the workmen upon that.

19942. The Home Office would advertise it and invite objections, and if the men objected they would have an opportunity of stating their objections. Do we agree so far ? What is the next step ? Supposing the Home Office gets certain objections, supposing they objected to it themselves, what is to be done next ?—Then I suppose they would have to be submitted to Parliament.

19943. Argued out in Parliament, we agree up to that point. I suggest, then, if you have no objection from the workmen but the Home Office objected, that it would be a question between the employer and the Home Office, and if we could not agree on a single arbitrator that a Judge of the High Court should appoint one ; if there are objections from the workmen the workmen and the employers would have to agree upon an arbitrator or the High Court would appoint one; and if there were objections from the Home Office and the workmen, the proceeding would be the same. Do you see any objection to an arrangement of that sort away from Parliament altogether and let this arbitrator decide what the rule should be ? Do you see any objection to a scheme of that sort ?—I should like to see the scheme before I say.

19944. Do you think that would be an improvement on the present scheme ?—In any case more provision ought to be made for the workmen to be parties to any special rules than there is at present.

19945. I want you to follow me out. Supposing before an owner can propose a rule he must get the sanction of the workmen—you would not go so far as that ?—No, I do not think I would.

19946. If he is to be at liberty to propose a rule without the sanction of the workmen, the discussion with the workmen would be a mere debating society ?—I do not follow you.

19947. If the workmen have no veto why discuss it with the workmen at all at that stage ?—I am suggesting that the workmen should come in at a later stage before the rule is established. It is proposed by the employer, the Home Office advertises the rule, and the men, if they wish to object to it, can object to it.

19948. (*Mr. Enoch Edwards.*) How can the workmen propose a rule ?

(*The Witness.*) The workman has not the right to propose a rule.

(*Mr. Smillie.*) That is the point.

19949. (*Mr. Ratcliffe Ellis.*) Do you go so far as to say that the workmen should propose the rule ? The obligation

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of the Act at present is that the owner has to propose these rules. That is what the Act puts upon the owners?—We suggest that the Home Office should propose the rules.

19950. So they can now. Do you wish to withdraw from the owner the right to propose rules?—No, and I do not see any objection to giving the workmen the right to propose a rule, in fact I think it would be desirable.

19951. You think they ought to propose special rules too?—Yes.

19952. Then the employers object if they choose?—Yes.

19953. Instead of the Home Office proposing a rule as it is now you say that the men should be entitled to propose a rule or the owners?—Yes; in practice, although they have not proposed the rule in the first instance, they have had joint conferences.

19954. The Home Secretary has proposed a rule for you?—Yes.

19955. You would wish to have the right given to the workmen to propose a rule. How would you do it? Take the workmen of a colliery. There is only one owner and there is no mistake in finding out who that is. You would have a majority of the workmen, or how would you ascertain whether it was the wish of the workmen that a rule should be proposed?—Of course to get perfect unanimity amongst the workmen would be rather difficult, I agree.

19956. I want to see exactly what your scheme is. If the workmen come to propose a rule who are to be the workmen?—It must be the majority in any case.

19957. If the majority of men in a pit desire to have a rule they should propose a rule?—Yes.

19958. The scheme wants a little thinking out?—Yes, it does.

19959. In haulage roads it would be an advantage if there was a separate travelling road everywhere, but you recognise that that could not be done in every existing colliery?—There would be enormous difficulties in some.

19960. You would not suggest that should apply to all?—There are a great number of collieries where it might be done without a big expense.

19961. And it might be an advantage to do it?—Yes.

19962. If it can be done you think it desirable to do it?—Yes, I do, and in new collieries I would make it compulsory.

19963. That there should be a separate travelling road. You used rather a strong expression, I think, when you said that the workmen had been criminally neglected?—Yes.

19964. Whom do you blame for that?—I blame the owners and the Home Office and Parliament, everybody who has anything to do with this, as well as the miners' agents of course.

19965. Can you point to any occasions when you have taken any means to instruct the men?—Lots of times.

19966. Has it been without avail. Have not you succeeded with all your efforts to make the men careful?—It is not a question of the men being careful. Those remarks apply to the provision of apparatus for rescue work after an explosion.

19967. You think that has not gone on fast enough?—It has not gone on at all.

19968. Do you not think it is very desirable that, in addition to dealing with an explosion when it arises, means should be taken to prevent explosions?—I take that for granted.

19969. What has been done by your Federation in order to encourage carefulness on the part of the men to guard against these dangers which cause explosions?—We have done everything that I think we could do.

19970. And you have not been able to succeed?—I do not think it is so much in the hands of the men as it is in the management.

19971. In what way do you guard against explosions?—By the proper ventilation of the colliery, the prevention of accumulation of gases and accumulations of coal dust. All those are management and not workmen's questions—by the watering of the mine.

19972. You think that so far as the workmen are concerned there can be no responsibility put upon them?—I would not like to say that: among 800,000 there are certain to be some who are not as careful as they should be.

19973. If we had perfect workmen we should have no accidents?—And perfect management too. We should have none at all then.

19974. You would hardly say that it was criminal neglect on the part of the employers?—I am very much inclined to say so. I think if I had a fiery mine employing 1,000 men I should apply myself somewhat to taking all the precautions that could be taken in case an accident took place, and not show the utter absolute neglect there is on that phase of the question at present.

19975. I think you are taking too hard a view. There has been great improvement, has there not, in recent times?—I do not think you follow me. I complain that there is nothing done. I will admit that there has been great improvement with respect to the prevention of explosions. I think the watering has been better attended to, and, speaking generally, I think great interest has been taken as compared with what was taken in former years, but as far as trying to minimise the effects of these explosions when they take place, and to see whether some of the men are alive immediately after the explosion, nothing has been done, absolutely nothing.

19976. With reference to enquiries after a coroner's inquest, do you think that the coroner's inquest does not bring out all the facts, or do you think that it does not punish people?—It does not bring out all the facts, to start with, sometimes.

19977. It is upon that ground that you wish to have a second enquiry?—Yes.

19978–85. Are you satisfied with the constitution of the court, so to speak, where a second enquiry is ordered by the provisions of Section 45? Supposing an enquiry is ordered, are you satisfied with the method of procedure and the powers given to it?—Yes, I think so, on the whole.

(*Mr. Ratcliffe Ellis.*) All that you want is that they should be more frequent, or, as Mr. Cunynghame has put it, be more liberally interpreted?

19986. (*Mr. Enoch Edwards.*) You say that the present number of inspectors in your judgment is not sufficient for the work?—No.

19987. You are perhaps aware that the districts now are mapped out into 12?—Yes.

19988. For the coal mines of Great Britain?—Yes.

19989. Is it your suggestion that there should be more districts?—Yes. I think the Western District, the Monmouthshire District, including Somerset and Devonshire, is a very good area.

19990. You speak of those because they lie nearer your own home?—Yes, and I know the extent of them well.

19991. There is the Midland District, embracing three or four counties, where the chief inspector spends a lot of time in travelling?—Yes.

19992. If there were more districts created there would be less time lost in travelling?—Quite.

19993. This figure is taken from the bill the Miners' Federation provided?—The 1 in 10,000?

19994. Yes.—Yes.

19995. Do you suggest that these additional inspectors should be drawn from the ranks of men who have had practical experience as pitmen?—I do.

19996. Mr. Ellis got you to admit that you have no fault to find with the present inspectors?—He did.

19997. I suppose you have not, either?—Other than as I said to Mr. Ellis, that practical experience must be an additional qualification.

19998. If this type of men were engaged they would be able to pay inspections at the collieries oftener than they do now?—Quite. Perhaps I ought to say I think they would be likelier to do the laborious work of minute inspection.

19999. Inspectors are going round inspecting reports and the plans at the top?—Yes.

20000. You think that is necessary?—I think so.

20001. You refer to the number of men holding first-class certificates, colliers and workmen who have sat for examinations?—Yes.

20002. There are a number holding first and second-class certificates working at the coal face?—Yes.

20003. I understood you rather suggested as a grievance that these men could not be employed as firemen?—I did.

20004. Would they in the majority of cases care to be firemen? Is that the extent of their ambition?—Not

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perhaps the extent of their ambition, but it must be their ambition to become colliery officials that induces them to study mining and go in for these examinations, and the fireman is the first step up in that direction.

20005. What is the objection to colliery managers not employing these men as firemen: is it that they do not like too many rivals about them?—That is suggested. I might say I do not know that it is very relevant to that question, that Mr. Abraham and I among others were listening to a deputation only yesterday, where, rightly or wrongly, a young man, a collier, who had sat and secured one of these certificates, said that he had had notice to leave the colliery, and he could not attribute it to any other reason but that he thought the manager did not care to have him about because he had this special qualification. That was only the day before yesterday.

20006. (*Mr. F. L. Davis.*) You do not suggest that the colliery manager must appoint everybody as an official in the colliery who has a certificate? He would get many more men with certificates in the colliery than there was room for officials in the colliery. He must pick and choose between them?—What I am astonished at is that numbers of these men are available for this position of fireman, and it is within my own common knowledge that other men are appointed as firemen who have taken absolutely no steps whatever to qualify themselves theoretically. They may be practical working men and are good colliers, and thrifty men.

20007. (*Mr. Enoch Edwards.*) I may take it what you mean is that you do not wish to reflect upon the present firemen?—No.

20008. They are a body of men who understand their work and perform their duties well?—Yes.

20009. The majority of them have been brought up in the pit through its stages, and have been colliers?—The majority of them: I have known of some extraordinary appointments, but they are not general.

20010. In your experience in Wales is there a tendency at all to put a manager with a first-class certificate to control more than one colliery?—It is in operation, but I do not think that it is very general.

20011. There are a number of people who pass the examination who were quoted to you. In many parts of the country is there a growing disposition to put a chief manager with a first-class certificate over a general manager with a second-class certificate at each of the pits in a colliery? What is the practice with you?—That is in practice, but I do not know whether it is growing or not: I could not say. It is adopted in some cases.

20012. In your judgment do you think it desirable that there should be a responsible first-class manager at every pit?—I do, certainly. I do not see how one man can take the responsibility of managing more than one pit.

20013. It is obvious that the area of first-class certificates is being narrowed if you make one first-class certificate do for two or three pits and content yourself with appointing men with second-class certificates at the other pits?—That is so.

20014. With reference to workmen's inspection, I gather the sum total of what you suggest to us is that workmen themselves do not take a very keen interest in this question?—Not as keen as I think they should.

20015. You are not prepared to say what is the special reason why they do not?—Not really.

20016. You think now it would not arise in these days out of any fear that the colliery people would take advantage of a man because he had made an inspection?—In some cases that would operate, no doubt, but I am not prepared to say to what extent. I say at once I do not think that is the general reason.

20017. It would not operate to the extent now it would 20 years ago?—No, nothing like it.

20018. After all, managers are keenly interested in the safety of their pits, and if an inspection by a workman contributes to it, it is to the interest of the Company that it should be done?—Yes.

20019. Now with reference to the question of fines imposed at the colliery for offences, have you had much experience of that in South Wales?—No. As I have said, I knew it was done occasionally, but I understand that there has been evidence given here that it has been done to a considerable extent in South Wales.

20020. In Monmouthshire?—That does not come under my personal knowledge, so that I cannot say.

20021. Not in South Wales, but in Monmouthshire to a very large extent. You say you think after all it is not in your judgment the best thing to fine the men in the colliery offices?—I think not.

20022. A good deal can be said against it?—Quite.

20023. It is suggested unless you enforce some sort of fines, either in Court or in some other way, that you cannot get proper discipline in the colliery. What is your opinion about that?—Is it not possible in well-managed collieries where the discipline is maintained, to carry them on without resorting to these fines?—I think lots of these breaches of discipline occur in consequence of the laxness in their enforcing them regularly. They shut their eyes to little breaches, and, to use an illustration, it is very much like the busmen in London who have printed in front of them "Drive slowly," but they never take any notice of it, and it is only an occasional policeman that enforces it. So it is at the colliery: lots of Special Rules are more honoured in the breach than in the observance, until something happens somewhere, and then it is enforced for a while.

20024. For the moment we are dealing with fines for breaches of rules which affect the safety of the men and the safety of the colliery?—Yes.

20025. Many of these fines so imposed are imposed rather for other matters. It is a question of a man getting his coal clean. It is not a question of the health of the collier?—Quite.

20026. At any rate, whatever may be the view of the workmen on the question, it is suggested to you that some workmen prefer going before the Court. Whatever the workman's view, you think it preferable that he should be taken to the Court rather than fined in the colliery office?—Yes, I do, and I think the offences would become fewer.

20027. There is one rather important matter you have put before us which I should like to ask you about again: that is with reference to the duties of the firemen, or duties other than those of the safety of the pit as imposed on the men. I gather from what you said that very largely the firemen are expected to see to the coal being sent out?—Yes.

20028. You think that interferes with their proper duties in attending to the safety of the pit?—It must do. I am strongly of opinion that his duty should be absolutely confined to the measures of safety necessary for the men.

20029. That is to say, a fireman is supposed to examine working places?—Yes.

20030. He has to go round and examine?—Yes.

20031. And keep his eye generally on the safety of the men, see that the ventilation is proper and going on, and see that at all times the law is being carried out. That should be his work rather than looking after coal coming out?—I would include also, to see that there was a sufficient supply of timber in every working place.

20032. The fireman should be a sentinel to look after these men, and you think that the question of getting coal out should be the duty of somebody else?—Quite.

20033. (*Mr. F. L. Davis.*) On that last point are you not putting it rather high to say that it is the duty of the firemen and the firemen only to look after the getting of the coal out?—I did not say it was his duty only, but he is largely made responsible for the general traffic, and that kind of thing in his district.

20034. What does the overman do?—He occasionally walks round the colliery and spends a large amount of his time at the bottom of the shaft, seeing that things are all right there.

20035. Is it not the duty of the overmen to a very large extent to look after the haulage part of the districts, and see that the coal is coming out?—The fireman is expected to do it.

20036. A part of it, but it is not all on the fireman's shoulders?—Possibly not all of it. There is a master-haulier in some places, and a manager, of course.

20037. There may be some cases in your knowledge where the fireman has a good deal of that work to do, but generally I do not think you would say that that is his chief work. There are other officials, the overmen and others, who have to look after getting the coal out beside the firemen?—Of course there are other officials. That is perfectly true.

20038. Your general statement is that. I am only putting it as I think you state it—correct me if I am wrong—the fireman has more work to do for the size of his district very often than he can properly do?—Yes, and I do not think he ought to have—I press that—anything

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at all to do outside his proper duties as fireman. He ought to have nothing to do with the arrangement of the traffic and looking after the hauliers and the distribution of the trams, or any of that class of work at all. I think he should be confined to looking after the safety of his district.

20039. My experience is that it is the overman who has most to do with the matters you mention, and not the fireman in many places?—It is absolutely impossible for the overman to do it in a big extensive colliery. He can only be in one district at a time, whereas each fireman has his own particular district.

20040. In reply to Mr. Ellis on Rule 38 you said that you were in favour of workmen's inspection being carried out by men who were not necessarily working miners at the time, but who had been in their time and had ceased to be, and you said the checkweigher might be employed for that purpose?—Yes. Mr. Ellis asked me if I should not object to the checkweigher.

20041. Do you think it advisable that the checkweigher should make an inspection; I do not mean to say any one particular man, but generally speaking that a checkweigher should make an inspection?—I do not see any objection to it.

20042. Do you think that it tends to the harmonious working of the colliery that a checkweigher should?—I think so, if he does his work conscientiously.

20043. A good deal depends upon the checkweigher, upon the man, I mean?—Yes: it would depend upon that whoever you appointed.

20044. Do you think that many colliers, whether holding certificates or not, are anxious to become firemen?—I think there are a large number. I believe all these men who have certificates would accept situations as firemen if offered. I know numbers who have made application and their applications have not been entertained.

20045. I think you are quite right in what you said, that in Wales at any rate there are a large number of working colliers who have second-class certificates?—There is no doubt about it.

20046. The manager cannot appoint all these men as officials because they have certificates; there might be too many for the post; therefore he has to pick and choose between them?—Yes. My complaint is that he very often takes the man who has given no study at all to the question; not only has he no certificate, but he has not attempted to qualify for what I regard as the special functions of the fireman. He is chosen because of some other qualification; he is a good workman, and the employers see in him a man able to attend to these other duties I name, and he is appointed because of that.

20047. The manager appoints generally the best man in his opinion for the work. I put it to you you can quite imagine a number of men in a pit, some with certificates and some without, and it is quite possible some without would be better men than those with certificates. It is possible?—The strange part of the thing is that when we come to the higher functions in life we do not generally hear that suggested. For instance, you would not suggest that with an inspector.

20048. A second-class certificate is a very different thing to a first-class certificate, or an inspector's qualification?—In degree. The degree is greater, but the principle is the same.

20049. I asked you just now if you thought a good many colliers were anxious to become firemen. Do you not know from your experience in times like this, with wages fairly high, that the colliers earn higher wages than the firemen?—Some of them would.

20050. I know that is the case from my own experience?—I admit that. I think some colliers would be earning more now.

20051. I say in good times; I do not say all through?—Taken generally I think the firemen's wages would be higher than the colliers', taking a period of years.

20052. You do not suggest, do you, that the fireman neglects his work, that is the ventilation and the finding of gas, and his important work, for work such as seeing that the coal comes out properly?—I am afraid he is compelled to sometimes.

20053. Because he has too much work to do?—Because he has so much work to do, he really cannot give attention to it all.

20054. It is not conceivable that a manager would allow that state of things to go on if the man had in his opinion too much work to do. It is to the interest of the manager that the fireman should do his work properly. He is responsible?—Yes, it is to the interest of the manager.

20055. With regard to the Special Rules, you say a good many men do not read the rules?—I suppose that must be so.

20056. Does your Federation or you, as miners' agents, do anything in the way of impressing upon the men the necessity of carrying out the Special Rules?—We do, often; I mean it often happens, if we have sometimes to call attention to the want of inspection—it generally begins by our calling attention to the want of greater inspection, and when we do that we always urge upon the men that they should properly observe the rules.

20057. I see you have done it, but I did not know that it was generally done?—I think you may take it that we have a sincere desire that the men should observe all the rules, and if we do not do as much as we might, we shall be prepared to improve.

20058. After all, the object of the Special Rules is really to make for the safety of the working, and the safety of the men, and the protection of the property?—Quite so.

20059. If the men were to carry out these Rules more carefully there would not be the same necessity for extra inspection, would there?—I think if you say both men and the management, I am prepared to agree with you. I think in the matter of timbering, for instance, the only remedy the workman has at present, if he has not sufficient timbering to keep himself safe, is he is told he must withdraw from his working place. That, to a man earning small wages and having a family to support, is a great temptation to break a rule and continue working until the timber comes. I have known that to take place, and I think you will find that it is a very common occurrence; rather than the men withdraw and loose their wages they will take a bit of risk until timber comes.

20060. With regard to the timbering rules and the spragging, I think you said, in reply to Mr. Ellis, that you agreed that within the maximum the manager was to decide where they were to be placed, what distances apart?—The spragging rules are set by the Special Rules.

20061. Yes?—In the principal Act, really.

20062. (*Mr. Ratcliffe Ellis.*) In the General Rules?—Yes.

20063. (*Mr. F. L. Davis.*) Owing to the great difference of conditions in the different places, it is not possible to do anything else but leave it to the discretion of the manager within limits. That was your answer, I think?—No. It is a very difficult problem, I will admit: as far as our seams are concerned there is what is known as systematic timbering, but, I think, it might be attempted more generally than it is at present.

20064. You made a difference between the timbering and the spragging?—Yes. With regard to the spragging I do not say that you can have a lesser distance than six feet. It would seriously interfere with a man getting his coal at all if you reduce that distance.

20065. With regard to the general timbering, you thought something more might be done with benefit by some discussion between the management and the men?—Yes.

20066. I think you said you did not think it would be possible, at any rate in a very large number of cases, to make travelling roads compulsory except in new collieries?—I said there were some places where it would be very difficult: there are other places where, I think, it might be done even in old collieries, with very little trouble.

20067. You made rather a sweeping statement with regard to the breaking of shackles and the examination of shackles. Have you had any experience—it is only lately it could have been—with regard to how far electric hauling has been an improvement in that respect?—No, I am afraid I have not: in fact, I have not seen the electric hauling underground at all.

20068. There has not been very much of it up till the last few months, but, I think, you may take it from me that there is a great improvement. The haulage being steady instead of jerky, as it is by compressed air sometimes, or by steam, it is a steady pull, and the chance of breakage of shackles is much less than it has been before. I think that will be found to be so as electric haulage is used more generally?—Still, the precaution of periodical examination of the shackles is not an expensive matter, and it may reduce some of these accidents—a number of them.

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20069. You suggested, to get over the difficulty of the dust to some extent, that the trams should not be filled so full ?—Yes, should not be filled above the level of the tram, whatever height tram you want.

20070. That would mean either that with the existing trams you would have practically only half a load, or you would have to get new trams, standing much higher in order, to get out the same quantity of coal ?—They might alter their present trams without disbanding them altogether.

20071. You would agree with me that sending out half-filled trams would be very expensive ?—I do not suggest that at all: I suggest you should have a tram sufficiently high for the height of your roadway, the height you are accustomed to pile your coal up to now, and that the tram would be filled to the level instead of being piled up above the tram.

20072. With the existing pits, in many of the valleys throughout South Wales, do you think it would be possible to have the screens any considerable distance from the pits ?—No, I am afraid, in some of our narrow valleys, it would be a bit difficult.

20073. It is the formation of the country that makes it difficult for us ?—Yes.

20074. It is easy in a flat country to lay out your surface arrangements in a very different way from what you have to do in our narrow valleys. Do you agree with that ?—Yes: in some cases it would be difficult.

20075. You said you thought that the same type of safety lamp should be used. Is it the same lamp, or the same type of lamp, that should be used generally ?—I think that there should be a provision that all lamps should be up to a standard. I hope this Commission will, as the result of their enquiries, set up a standard that every lamp must comply with—I do not say the same type of lamp, but that there should certainly be standard provisions, and that no lamp, unless it can come up to some test, should be permitted.

20076. That is what I mean by "type" ?—Only those should be allowed.

20077. Then you said that one standard or class of oil should be used ?—I have understood that it is possible for inferior oils to be used, and not only give the workmen a very poor light, but fill up the gauze of the lamp and make it useless as a safety lamp.

20078. There is no doubt, on the owners' side of the table, that anything they could do to make lamps safer would be an advantage to them, in the long run, but, I think, we have had evidence before us already, or opinions given by the inspectors, with regard to a standard of safety lamp ?—Of course, I do not pretend to be an expert either as to the lamp or the oil, but what has impressed me is, as I have already said to this Commission, that a Commission sat 20 years ago, and they, even then, felt that there was a necessity of some unification of the kind of lamp to be used and the necessity of further research with respect to these lamps, and, as I understand, very little has been done from that day to this. I mean, only so far as private individuals have tried for speculative purposes to put a lamp on the market. There has been no central authority, as was suggested by this Commission, to see what could be done.

20079. With regard to the second enquiry, in addition to the coroner's inquest, what sort of Court would you suggest for the enquiry: how would it be composed ?—I am not prepared to suggest any kind of Court.

20080. (*Mr. Ratcliffe Ellis.*) I think the witness thought the provision in the Act was sufficient ?—I did say so, for the time being.

20081. (*Mr. F. L. Davis.*) You thought that it was not sufficiently acted upon by the Home Office ?—By the Home Office.

20082. (*Mr. Smillie.*) Mr. Ellis put it to you, very pointedly, as to what your interpretation of inspection of mines really was. I do not think you answered very clearly. Section 41 of the Act deals with the powers of inspectors and Paragraph (ii) says, "to enter, inspect and examine every mine" ?—Yes.

20083. Do you think that it is an inspection or examination of a mine for a mines inspector to go down the pit and go into one particular section or part of the mine and come out again ? Do you call that an inspection ?—No; I think I certainly made that clear, because I regarded it as a man sampling a piece of cloth.

20084. Do you think that the inspection of 10 per cent. of the mines of this country, as at present carried out by the inspectors, is a complete inspection ?—No.

20085. You do not think 10 per cent. of the mines of Great Britain are completely inspected once in every 12 months ?—No, I think not.

20086. What you really mean by "inspection" would be a complete examination of the mines, going from place to place and section to section, until the Inspector had seen the whole mine ?—Any other inspection to me is useless in a coalmine.

20087. That is what you would call a thorough inspection of the mine ?—Yes.

20088. As a practical workman and Miner's Agent, you feel that is not done at the present time ?—No, it is not.

20089. Is it not a physical impossibility for the present class of inspectors to carry out inspection once in 12 months of all the mines in Great Britain ?—Oh, absolutely; they could not do it once in two years.

20090. In your opinion the mining community will not be satisfied that their safety is being properly looked after, so far as the inspector is concerned, until a thorough examination of the mine is made periodically ?—That is my opinion.

20091. Do you think once a month would be too much for a mine to be examined, especially a mine where there is supposed to be any danger from accumulation of gases, or any other cause—serious danger from any cause ?—I do not think it would.

20092. You think as far as possible that inspection should be surprise visits ?—Yes.

(*Mr. Ratcliffe Ellis.*) Will you ask the witness if he thinks with 80 inspectors that could be done ?

(*Mr. Smillie.*) Do you think even with 80 inspectors for the whole of Great Britain that there could be a thorough examination of all the mines once in 12 months ?

20093. (*Mr. Ratcliffe Ellis.*) Once in a month ?—Once in a month, I hardly think it could.

20094. (*Mr. Smillie.*) It would take 800 ?—It would take a great number. Of course there are some of the mines where this inspection may not be required to the extent that it is at others.

20095. I was going to put that to you. You yourself know some mines where you do not think inspection every month or once in twelve months would be required because of the careful management ?—Yes, and the nature of the mine itself.

20096. Yes, in other cases because of the nature of the mines, and perhaps because of the management to some extent. There should be regular inspection until the management was improved ?—Yes.

20097. Such a case was the mine in which there was that explosion mentioned this morning ?—Genwen.

20098. If proper inspection had taken place, and proper precautions had been taken in all probability that explosion would not have taken place ?—I think so.

20099. That is your opinion ?—In fact, one of the defences in the action where these fines were inflicted, £5 in four instances, was that the inspector had been there several times.

20100. And he did not find any fault ?—He did not find any fault.

20101. With what was clearly a breach of the Mines Regulation Act ?—Yes, due to the perfunctory manner in which the inspection was made.

20102. Mr. Ellis put it to you, do you think mines inspection has done any good; does it make mining more safe than it would be ?—Certainly.

20103. Have you known of cases in which special preparation was made for the inspector, extra timbering prepared and brattice taken in, if it were known that the inspector was coming ?—Scores of times in my own personal knowledge.

20104. You do not think that would have been done had it not been known the inspector was coming ?—No.

20105. So that from that you take it additional inspection would lead to additional safety ?—Quite.

20106. Rule 38 is a point upon which I understand the miners are very strong. You see no reason why the inspection under this should be confined to persons who are at the moment working as miners ?—No, I do not.

20107. Do you think that was the intention of the framers of this clause ?—No, I do not think it was.

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20108. If that prohibition were removed it would be possible for the miners, if they cared to do so, to appoint two thoroughly practical miners in any district and allow these men to continually inspect one pit after another?—It would be possible if that were removed.

20109. It is impossible under the present interpretation of that clause that such a thing could be done?—Yes.

20110. Supposing they were practical working miners at the time of their appointment, after they make an inspection of a mine they would then cease to become practical working miners unless they returned to their work again?—Yes, and could not be appointed at another colliery.

20111. Do you remember the time the miners had no right to appoint check-weighmen unless men engaged at the mine in which they were about to be appointed?—Yes, very well.

20112. The miners requested Parliament to alter that?—Yes.

20113. On the ground that they wanted a wider selection?—Yes.

20114. The Government ultimately gave them the right to appoint any person to become a check-weigher?—Yes.

20115. You think that would be a considerable improvement if that were done in this case?—I do.

20116. Could you give us approximately the extent of the firemen's district in your larger collieries, or the number of men under their charge?—I only want it approximately, say 40 or 50 or 100 men?—It is very much more than that. I think that I can safely say that the number of working places would be anywhere from 50 to 100, and even higher than that.

20117. From 50 to 100 working places and your system is longwall?—Yes. I may say a man passed me a note at our Council meeting where we had representatives of the whole of the South Wales Coalfield yesterday, and this is the note that one of the representatives, Mr. John Thomas, of Garw, whom Mr. Davis knows very well, a Miners' Agent, a very reliable man, and he says from 85 to 90 places producing 500 tons per day a fireman would have to inspect.

20118. The general system in South Wales is the longwall system?—Generally, yes.

20119. A fireman under the Rule by which he is appointed is supposed to examine the working places, all the travelling roads and haulage roads and all side roads in which men may pass to and from their work?—Yes.

20120. That is supposed to be his examination in the morning?—Yes.

20121. Would you say as a practical miner that it is physically possible for a fireman from the time he starts in the morning until he returns to the pit bottom or station to carry through that examination if he goes in and out all the roads?—It is possible for him to walk the roads, but I say it is absolutely impossible for him to make a careful examination. He cannot do it.

20122. Have you much ripping in your longwall workings?—Yes.

20123. A ripping of each roadway?—Yes.

20124. It would be necessary that a careful examination should be made of each road-head for explosive gas in addition to examination in the face?—Yes.

20125. Is it not your opinion that it is impossible to make that examination if all the roadways are examined?—I do not think it can be done in the time.

20126. Do you think that those examinations are made in the thorough manner expected?—No, I have just said they cannot be done, so that it goes without saying they are not done.

20127. Is it customary (unless you are sure do not answer) for firemen to find that they have not time, but go straight along the face and do not go out of the road and in and out again?—I am told that is so.

20128. You do not know that of your own knowledge?—Of course in the examination before the shift there are generally not many workmen there to see, but as to the examination during the shift, I am told that is the general practice: firemen never think of going out of the roadways.

20129. He is only supposed to put the day of the month and the chalk mark on the face. There is no method of finding out whether he has examined other roadways or not?—No.

20130. The firemen are a very careful and reliable lot of men as a whole. Do you think that any large number of them have any theoretical knowledge of gases?—I think that there are a very large number who have not that theoretical knowledge.

20131. Their knowledge is practical generally?—I ought to say this perhaps——

(*Mr. Ratcliffe Ellis.*) Those are the sort of men you recommend for inspectors, men with practical knowledge.

(*Mr. Smillie.*) Who have also a certificate.

(*Mr. Ratcliffe Ellis.*) You want both?

(*The Witness.*) We give preference to the men with certificates.

20132. (*Mr. Smillie.*) We do not propose that anybody should become an inspector in this third grade who does not hold a first-class certificate of competency, and if he holds a certificate of that kind he ought to possess the knowledge. The firemen, good as they are to-day, would be better if they had the theoretical knowledge which would enable them to hold a certificate?—Yes.

20133. We may take that for granted?—I think it goes without saying.

20134. Is it your opinion that the fireman is the most important man who goes down a colliery so far as safety is concerned?—Yes.

20135. Even to a greater extent than the manager the lives of the workmen are in the hands of the fireman?—If the fireman is neglectful then the manager is hopeless.

20136. A most important question this Commission has to deal with is timbering, and you dismiss it in your evidence with a very few words. The question has not been put as to whether you think that timbering should be done by men specially appointed by the employer and paid by him, or that men should be appointed and paid by the employer whose special duty it would be to see that the workmen timbered their places properly. I think you have not answered that?—I have not, and I find very considerable difficulty in answering it as far as our practice is concerned.

20137. So far as your practice in Wales is concerned?—Yes. If we were assured that really practical men would be appointed even to do this work and a sufficient number of them to ensure that when a post was required the men would be there to put it up, then I should say yes, but our men are being paid by results on the amount of coal they get, and the temptation there would be, if there is a special man to put up the post and a post is wanted and the man is not there to put it up, for the collier to get more coal till the man comes, rather than put up the post himself: so that I see exceedingly great difficulties.

20138. Do you think accidents in mines in this country would be reduced considerably if all the coal getters were paid day wages rather than being employed by piecework?—Certainly.

20139. The piecework system makes them run risks they would not otherwise run?—It must do.

20140. You have your mind made up as to whether you would alter our present system of timbering. You think there should be systematic timbering?—Yes.

20141. A very large number of accidents arise from haulage. I suppose the drawbars of the trams would require the same examination as the shackles?—Yes.

20142. They are in the same position, and very often a drawbar breaks?—That is so.

20143. Your system of haulage in Wales lends itself to considerable trains of trams going together?—Yes, very long trains sometimes.

20144. Sometimes on dooks and at other times on heads or headings?—20 and 25 trams.

20145. Would you approve of a chain or some other method passed over the whole train of tubs and joined, so that in the event of a shackle or drawbar breaking there could be no run-away?—Anything that would prevent a run-away.

20146. Is there any system at present in which a chain is taken over the top of the tubs, or which chains the tubs to prevent them breaking away, in Wales?—There may be.

20147. If you are told that system is in force at many collieries do you think that it would tend to greater safety?—I think so.

20148. If that were done, if a shackle or drawbar broke, the tubs could not run away?—No.

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20149. You are favourable to sufficient room being left on the side of a haulage road to enable men to walk along there. You do not apply the same to a horse road?—Of course it is desirable everywhere, whether it is haulage by machinery or by horses. The degree of danger is not the same in a horse road.

20150. Are there many accidents arising in the country generally on horse roads?—Yes, I am afraid there are.

20151. Where should a driver be in driving a horse with a trailer and 2, 4, 6 or 10 tubs? Where is the most suitable place for him to drive—between the horse and the tubs?—No, I think he should be in front of the horse.

20152. Has he any spragging to do coming down hill in any part?—Yes, he has some.

20153. Is it possible to sprag in front of the horse?—No, unless he stops him.

20154. He would require room at the side of the road to do spragging?—I am afraid that sometimes has been responsible for accidents, that there has not been sufficient space where spragging has to be done.

20155. It would be a great deal safer if there were room on the side of all roads where it is possible to have more room?—Yes.

20156. Your coalfields in Wales have developed rapidly during the past 25 to 30 years?—Very.

20157. Would you say that there is a very considerable proportion of workmen working underground and at the face in South Wales who have gone into the mines after they reached manhood?—Yes, a big number I should say.

20158. What we call unskilled workmen?—Yes.

20159. Do any go to work at the coal face immediately they start work?—Yes.

20160. Do you know whether or not the rule on the point is carried out that they must have two years' practical experience with an experienced miner before having a place of their own?—I have heard it suggested that that rule is being met by putting two unskilled men together.

20161. That was not the intention of the rule?—No.

20162. The intention of the rule was that persons should serve an apprenticeship of some kind to make sure that they were qualified to take a place for their own safety?—Yes.

(*Mr. Ratcliffe Ellis.*) That cannot be the construction of the rule.

20163-4. (*Mr. Smillie.*) Have you any miner employed in your mines in Wales who does not understand the English or the Welsh language?—No, I do not think so. I think we had a few Italians upon one occasion, but I think they are all gone.

20165-6. Do you think it would tend to safety or discipline in your Welsh mines if the workmen did not understand the English or the Welsh language?—All the powers we have would be brought about to prevent any workmen being employed in the mine who did not understand the English or the Welsh language. It must be a source of danger.

20167. You would be strongly opposed as an experienced miner to the employment of unskilled miners, especially those that did not understand the language?—Very strongly opposed. I cannot conceive anybody arguing that they would not be a source of danger, especially after the questions that have been put to me with regard to workmen observing the rules by this Commission even.

20168. Every miner working at the coal face is expected to ascertain from the fireman every morning as to whether or not his place is safe?—Yes.

20169. If he did not understand the language, and the fireman was not instructed in his language, he could not let him know whether it was safe or not?—Quite.

20170. You are in favour of the ambulance stretchers being closer to the working face if possible?—Yes.

20171. Some of the working places are fully two miles from the top?—Yes.

20172. Would you also be in favour of ambulance wagons being near the surface in order that workmen might be conveyed home quickly?—Yes.

20173. Have you any provisions of that kind in Wales at the present time?—Yes, a large number of workmen supply them themselves. There are lots of instances where from the fund they have for paying their doctors they also provide these ambulances.

20174. Where they are not provided, the old method of a cart or something else is used?—They are carried on stretchers.

20175. They are carried on the stretchers home?—Yes.

20176. Section 16, Sub-section (*b*) provides that shafts which are sunk after the passing of this Act should not be closer than 15 yards apart. From the experience which you have gained since the passing of this Act, do you think 15 yards is sufficient? Are they not too close together in the event of an explosion, or a fire taking place?—There would be better opportunity of preventing the explosion going from one to the other if they were farther apart.

20177. Would it be desirable in new mines that are being sunk that they should be farther apart than 15 yards?—I think so, and it must add something to the safety, and I do not see any reason why the cost should be any greater with a little difference in driving the connection.

20178. Would you be in favour of separating the down-cast and the up-cast pit-heads, so that in the event of a fire taking place at one it might not communicate to the other? Is there any danger with the down-cast and up-cast shafts connected by the same pit-head, in the event of fire in either the down-cast or the up-cast shaft, that it would be communicated from one to the other?—I think it would be desirable to separate them.

20179. If possible there should be a division between the two pit-heads?—Yes.

20180. You say the sanitary conditions in your South Wales coal mines, so far as excrement and filth are concerned, are not bad at this time?—No.

20181. Would you be in favour of baths being supplied so that workmen might wash themselves and change their clothing at the pit-head before going home?—I have often thought that desirable.

20182. Is it the case in many collieries in wet workings that the men come up in wet weather with their clothes wet through and have to go home in that clothing?—In a large number of instances they have to ride in the train.

20183. Do you think it would be a good thing if baths were supplied and drying stoves, which would enable the men to change their clothing?—It must be, I should think.

20184. Do you think that the mining industry in this country gets sufficient attention at the present time from the Home Secretary. Do you think it possible for the Home Secretary with all his duties to give proper attention to such an important industry as mining?—No, I think the industry is of sufficient importance to have a department to itself.

20185. Do you favour a mining department with a minister of mines whose duty it would be to look after the mining industry as a whole?—I do.

20186. You think it might tend to greater attention and greater safety in the mines?—Yes.

20187. There is one question I want to ask you, but I do not know whether I may. It is with regard to check-weighing. I understand the Welsh owners in every case erect comfortable shelters for check-weighers at the pit bank?—They do.

20188. You have no real trouble?—No trouble whatever.

20189. Have you acted as a check-weigher yourself?—No.

20190. You have had considerable experience in visiting at the pit banks?—Yes.

20191. Do you think it possible for a check-weighman to do his duty thoroughly where he is not properly protected from the weather and from dust and rain?—No, I do not think he could.

20192. Have you known of cases in which the check-weigher has called the attention either of the mines inspector, or your own District Committee, or yourself in cases of danger existing underground, want of proper ventilation and timbering. Have there been cases in which check-weighers have had to complain either directly to the union officials or the mines inspector?

(*Mr. Ratcliffe Ellis.*) Union officials would have nothing to do with it. He would have no right to make such a complaint to the manager of the mine. It would be going outside his duty altogether.

(*The Witness.*) As a deputy of the workmen I know of lots of instances where he has done so.

(*Chairman.*) He has done so whether entitled to or not.

20193. (*Mr. Smillie.*) I do not say to the manager nor to the management. My question was, have there been any cases in which the check-weighman has complained to the mines inspector or to the Union officials?—To the Union officials, yes. I do not know of a case where he has complained to the mines inspector.

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20194. The Union officials have taken action either by calling the attention of the management in the first place to it, or ultimately calling the attention of the mines inspector ?—Yes.

20195. In his position at the pit bank he knows sooner than anybody else from the workmen the condition of matters underground ?—Yes.

20196. It is recognised that the duty of the check-weigher, for which he is appointed, is to look after the weighing of the material and the correct marking of the material of each workman ?—Yes.

20197. He is generally looked upon by the miners to some extent as their representative ?—Yes.

20198. He often takes part in their meetings, and he hears complaints as to dangers and other things, and conveys them to the officials. Have you heard of any objection to the check-weighman taking part in those matters ?—We have several instances where we think the check-weighman has been removed for performing what he certainly ought to have a right of doing.

20199. Do you think the checkweigher should not have the right of citizenship away from the mines the same as anybody else ?—That is the great complaint we have.

20200. (*Mr. Wm. Abraham.*) With regard to the overman and the traffic, the overman would look at the traffic more particularly for the whole mine ?—Yes.

20201. The fireman would be attending to it in his own district ?—Yes.

20202. Both are necessary ?—Quite.

20203. So that the overman could not do what the fireman is expected to do in many cases ?—No, I do not think he could.

20204. With regard to this new class of inspectors that you are of opinion we should get, there the chief qualification would be, in addition to a man having a certificate, that he had been a practical collier himself, a practical repairer and knew the work thoroughly ?—Yes, that is my idea of it.

20205. That is the class of man in your opinion who would be able to ferret out, as it were, dangers lurking in various instances, where the present class of inspectors would not go and look for them ?—Yes.

20206. With regard to the present class of inspectors, in your opinion have they too much work to prevent any dangerous practice that they see ?—No, I do not think they have.

20207. Would it not tend very materially to reduce dangers if they could order and not simply advise ?—Yes, I think so.

20208. With regard to the firemen, you are of opinion if the districts that these firemen have to examine and, attend to were materially reduced, that would tend to the safety of life and of the mine ?—Yes, I think so.

20209. Do you know instances where firemen have been working 8-hour shifts ?—Yes, and they say (I have no statistics with regard to that) as the result the accidents are fewer than they were before. I know of some collieries where the owners themselves have put their firemen upon an 8-hour shift, three shifts of firemen, and we have testimony from those firemen themselves—I have no statistics with regard to that unfortunately, but they say the accidents are very much fewer since they have had the reduced hours as firemen.

20210. With regard to the present system of coroners' inquests, in your opinion that is not satisfactory ?—Yes.

20211. Did I understand you to say that the Mines Act, Section 45, would be sufficient if it is carried out ?—For the present I should say yes. I should say if that enquiry were held in all serious accidents—that is what I mean.

20212. You base that upon the qualifications of the persons who carry out that enquiry ?—Yes.

20213. Supposing that further enquiry had been carried out in cases that you know of, in your opinion would the decision have been different ?—I think so.

20214–5. Where a manager has been fined to the full extent of the Act under the ordinary system he is still at liberty to go on and manage that colliery, as he is doing in the last case that was mentioned at another colliery at the present moment ?—I think that the Court should have suspended his certificate.

(*Mr. Ratcliffe Ellis.*) It had no power.

20216. I understood you to say that you were satisfied with the provisions. Do you think that the Court should have power to suspend a certificate, or that that should be left to the Home Office ?—I have not thought of that, but what I have thought of is that the Home Office would attach very much more importance to the enquiry of this Court than the ordinary coroner's court.

THIRTY-FIRST DAY.

Thursday, 30th May, 1907.

PRESENT :

Lord MONKSWELL (*Chairman*).

Sir LINDSAY WOOD, Bart.
H. H. S. CUNYNGHAME, Esq., C.B.
WM. ABRAHAM, Esq., M.P. (Rhondda).
F. L. DAVIS, Esq.
ENOCH EDWARDS, Esq., M.P.
THOMAS RATCLIFFE ELLIS, Esq.
JOHN SCOTT HALDANE, Esq., F.R.S.
ROBERT SMILLIE, Esq.
S. W. HARRIS, Esq. (*Secretary*).

JOHN GEORGE HANCOCK, called and examined.

STATEMENT OF WITNESS.

Mr. J. G. Hancock.

30 May, 1907.

20216A. (1.) *Inspection.*—No complaint whatever can be made concerning the manner in which the inspectors of the Midland district do their work. I think, however, that every colliery should be visited more than once every year by an inspector. The inspection should be thorough, every part of the mine being visited and examined. I should like an inspector for every 10,000 persons employed, and think there certainly ought to be one for every 15,000 or 20,000 employed.

(2.) I am of opinion that the size of districts should be reduced, as time now spent in travelling without adequate recompense would then be spent in inspecting.

(3.) I cannot admit that inspecting a certain area, and accepting that as a criterion of the whole of the colliery is satisfactory, reliable or safe.

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(4.) *General Rule* 38.—I do not know of more than one or two cases in Notts where workmen have inspected the mine. I do not think that it is in any case a question of expense so far as workers are concerned. I do not think that owners have contributed to the expense in any case.

(5.) Men think their examination tends to relieve managers of a responsibility they ought not to be relieved of, and places on men a responsibility they ought not to have. An unfavourable report might be detrimental to the examiner as a worker and subject him to the harsh treatment of his employer. An unfavourable report might also be detrimental to him as a co-worker.

(6.) Such examinations must in every case be to some extent superficial and incomplete because these men do not understand and cannot measure ventilation, cannot read plans, indeed, have little or no opportunity for seeing them, so their report could not be worth much, and, when they had done their best, might be misleading and productive of discomfort to themselves. Should an accident occur after one of these inspections this report may be produced on the owners' behalf, although, owing to its practical character and the inspectors' utter lack of theoretical knowledge or technical training, it may really be of little value in that connection, and in that way an interpretation or meaning may be placed upon it that is not honest to it or the inspectors. The condition of the mine at the time of the accident may be very different to that at the time of the inspection.

(7.) Mines are managed much better now than they were, consequently, there is not the necessity now for these inspections that there was. There is not, and never was, so far as my experience goes, any great desire, on the men's part, to make these inspections.

(8.) *General Rule* 4.—I am convinced that deputies do not examine the gates, but on entering the face by the first gate travel along the faces returning by another gate, leaving the intermediate gates unexamined. Shotfirers are expected, in these cases, to examine the intermediate gates, but they act very much on the same principle; consequently, these places are not systematically examined. I am convinced that deputies should be men of practical experience, *i.e.*, men who have worked in the mine.

(9.) *Discipline, Fines and Prosecutions.*—Generally speaking the men are opposed to any recognition of a system of fines, but in a few cases have agreed with the employers upon a system. I think that some offences can be met by a fine; others cannot, and prosecutions are then necessary

(10.) *Establishing Special Rules.*—I think that working men could, with advantage, be asked for their opinion when Special Rules are being prepared.

(11.) I am in favour of some of the Special Rules being put into the General Rules, especially those relating to machinery, shafts, managers, under-managers, deputies, and, perhaps, lamps and explosives.

(12.) *Haulage.*—I should like to have separate travelling roads wherever possible. I think, that on one side, at least, and the whole distance, there should be plenty of room to walk. It is a great advantage to have the refuge holes whitewashed on the edge and inside. Roads should be as straight as possible; dip should be as regular as possible, hills and swamps being avoided.

(13.) I think that drags should be compulsory. Overchains should be used to check or stop any runaway trams, and competent persons, not inexperienced boys, should be employed. Each person should know his own work, and be responsible for it, so that there may be no unnecessary division of responsibility. The engineman, especially, should not have any other duty.

(14.) *Other Classes of Accidents.*—Mine officials should be the only persons allowed to carry explosives, they should fire all shots, recover unused or misfire explosives, and account for all that they receive. Shot-firing should be done between shifts, especially in deep, fiery and dry and dusty mines.

(15.) Winding enginemen might be compelled to obtain certificates of competency.

(16.) Detaching hooks and safety catches should be provided with a view to saving life in cases of overwinding or rope breaking; appliances for shutting off steam, applying brake, and stopping the engine at a certain point in case the engineman fails to do so, should be provided.

(17.) Wastes should be filled so far as dirt will do this, and no dirt brought to bank unnecessarily.

(18.) Iron trams are safer than wooden ones especially in fiery mines.

(19.) The employment of unskilled labour is dangerous and should be discouraged.

(20.) Ambulance proficiency should be encouraged on the part of officials and workers.

(21.) *Investigating Mine Accidents.*—Coroners in our district are all that could be desired. I think that relatives of deceased should have ample and clear notice of post-mortem examinations so that they can be medically represented. In the event of either party desiring an enquiry, as per Section 45, the Secretary of State should at once direct such investigation to be made.

(22.) *Safety Lamps.*—Safety lamps are inconvenient, and injurious, consequently the use of them should not be unnecessarily extended; they should be securely locked, in every case, and should be thoroughly tested.

20217. (*Chairman.*) You come before us, I understand, to give evidence on behalf of the Nottinghamshire Miners' Association?—Yes.

20218. What official position do you occupy in that Association?—I am the agent and financial secretary.

20219. How long have you been in that position?—I have been agent and financial secretary since 1896. I was assistant secretary from 1892 down to then.

20220. You say in paragraph 1 that you make no complaint concerning the manner in which the inspectors of the Midland District do their work, but you think that every colliery should be visited more than once every year by an inspector, and that inspection should be thorough, every part of the mine being visited and examined. How often do you suggest that an inspector ought to go down the mine?—I think he should go down at least twice in the year.

20221. Twice in the year would be the amount of inspection you consider desirable, that twice in every year he should go through every part of every mine in his district?—I think so.

20222. Go right through it?—Yes.

20223. How many inspectors do you suppose that would require?—I could not say I am sure.

20224. A very great many more than there are at present?—Yes.

20225. Now every inspector with very few exceptions goes down some part of every mine in his district once in the year. That is what they do at present?—I am not sure of that.

20226. I think statistics show that is so. Almost every mine at all events is inspected once?—Yes, almost.

20227. Sometimes an inspector thinks a mine is in such a satisfactory condition that it is not necessary to inspect it, but as a rule he would go down every mine once a year?—Yes.

20228. But he will not go all over it?—No.

20229. I believe in the course of these inspections, as a rule, they only go over a small portion of a mine?—I believe that is so.

20230. Therefore you would suggest that there ought to be at least double the number of inspectors to do what you desire?—Yes.

20231. That is to say, they should go down every mine twice as often on an average as they do at present, and that all these inspections should occupy a great deal more time?—Yes.

20232-3. That would mean more than twice the number of inspectors. Inspection once every six months would mean twice the number of inspectors; therefore your proposal would mean three or four times the number, I presume?—I presume it would.

20234. (*Chairman.*) There are now about 40 inspectors and assistant inspectors, and you would suggest that there ought to be something like 200?—Yes, I think it would mean that.

20235. You say that you should like an inspector for every 10,000 persons employed. There being about 800,000 persons employed, that would mean 80 inspectors. You say you think there certainly ought to be one for every 15,000 or 20,000 persons employed. There is one for every 20,000 persons employed now?—Not in our district.

20236. What is the mining population of your district? What is the number of underground workers in the Midland

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district ?—I am not speaking simply of the underground workers, I am taking the total number employed, or the total number included in the inspector's returns.

20237. There are 103,000 persons employed and three inspectors. There are about 35,000 to an inspector ?—103,000 does not include those employed at the quarries and metalliferous mines.

20238. Including those, there would be something like 1 in 40,000. In your district you say that the inspectors ought to be doubled. The general result of your suggestion is that the inspectors should not only be doubled, but more than quadrupled if they are to visit each mine twice in the year instead of once, and if each visit is to take much longer than present visits. It is clear you want a great deal more than twice the number of inspectors ?—Yes.

20239. You yourself have suggested that perhaps 200 would not be an excessive amount ?—No.

20240. Do you think they should all be of the same class and receive much the same remuneration as the inspectors and assistant inspectors do now ?—No, I do not know that I am prepared to suggest that. I think that there might be inspectors appointed who had passed a certain examination and had some practical knowledge of coal mining simply for the purpose of inspecting mines, and not be subject to the same examination as the present inspectors.

20241. You would not pay them the same salaries as the present assistant inspectors ?—I do not see how that could be done.

20242. You would have a class of men employed who would get smaller salaries and who would not have the same qualifications ?—Yes.

20243. Do you suggest there ought to be more inspectors and assistant inspectors of the class that are now employed —the 40 or so now employed ?—I do not know that I make any suggestion upon that point: all that I am submitting is simply this, that the mines should be inspected more frequently than they are and more thoroughly than they are now inspected.

20244. You go on to say that you are of opinion that the size of districts should be reduced as time now spent in travelling without adequate recompense would then be spent in inspecting. If you reduce the size of the districts you must have many more districts, and I suppose you must have an inspector at the head of every district ?—Yes.

20245-6. Therefore you would require, if your proposals were carried into effect, more persons in the position of district inspector ?—Yes. I think that inevitably follows.

20247. Possibly each inspector might be satisfied, if you had more of them, with one assistant instead of two or three as they have now ?—Yes.

20248. So that possibly, although you would certainly have more district inspectors, you might do with about the same number of assistant inspectors as you have now ; and you would have further a third class of inspectors who would not be so fully qualified and receive smaller salaries. Is that your idea ?—Yes ; the third class of inspectors would be subject to the principal inspectors, would they not ?

20249-50. Yes, certainly. You would have three classes of inspectors instead of two. In the first place it would increase the present number of district inspectors ?—Yes.

20251. Each inspector of a district would have to have at least one assistant inspector ?—Yes.

20252. Therefore probably you would have at least as many assistant inspectors as you have now ?—Yes.

20253. Then you would have a third class who would be less highly qualified and consist of not less than 150 persons to make up the 200 ?—I could not say what the number would be. I should be guided by circumstances.

20254. You would have not less than 100 and perhaps as many as 150 of this new class of inspectors. That is your suggestion ?—Yes.

20255. Then you say that you cannot admit that inspecting a certain area and accepting that as a criterion of the whole of the colliery is satisfactory, reliable or safe. Do you say the only satisfactory, reliable and safe mode of inspection of a colliery is to inspect every hole and corner ?—That is so.

20256. With regard to General Rule 38, you know only one or two cases where the workmen have inspected the mines. You do not think that it is a question of expense, or that the owners should contribute, and your explanation of the disinclination of the men to avail themselves of Rule 38 is partly that their examination would relieve managers of a responsibility they ought not to be relieved of and places on the men a responsibility they ought not to have, and also that an unfavourable report might be detrimental to the examiner as a worker, and subject him to the harsh treatment of his employer. Take the first, that the examination by the men tends to relieve managers of a responsibility they ought not to be relieved of and places on men a responsibility they ought not to have. Have you had that position placed before you by the men ? —Yes: I give it there, if you will excuse me saying so, as the expression of the men themselves. I may say also that I endorse it myself.

20257. Why should not the men have a certain amount of responsibility for what goes on in the mines ? The men themselves are interested to a very great extent, and they may reasonably or unreasonably think the managers do not sufficiently care for their safety. In any case, must there not be some responsibility on the men unless you are willing to consider the managers infallible ?—There is the responsibility of the workmen always resting upon them for reasons given further on: they think that is a responsibility that ought not to be cast upon them, that is the responsibility of inspecting and reporting.

20258. I do not understand how it relieves the managers of their responsibility. I should have thought a manager under all circumstances would be responsible for what goes on in his mine, whether the men inspected or not. I should have thought that it was in the nature of a further precaution that the men should inspect. You go on to say that it is not so necessary because the mine managers attend to their duties better than they used to. If you have absolute confidence in them I can understand the men saying that it is not worth while to have inspections on their account, but I should hardly think they had such absolute confidence as all that. Mr. Ellis says it is very satisfactory to find that they should have so much confidence ?—I do not know that it is a question of confidence. I have not looked at it from that standpoint at all. My only submission is that the men do not undertake this inspection because they think if they presented a report it might be used against them later on.

20259. That is another matter. I was asking you to explain the first part of paragraph 5, that you think their examination tends to relieve managers of a responsibility they ought not to be relieved of and places on men a responsibility they ought not to have. I do not quite understand that statement ?—All I mean is this, if the men inspect the mine and report that it is safe and satisfactory and an accident occurs a little later on, that report will be brought up against the men undoubtedly, and on the manager's behalf.

20260. Of course it is a serious responsibility for a man to go down a mine, having power to inspect on behalf of his fellow-workmen, and declare that the mine is safe when it is not safe. You say they are not willing to take that responsibility on their shoulders ?—No.

20261. I can quite understand that view. Then you go on to say that an unfavourable report might also be detrimental to him as a co-worker. I understand it might be detrimental to him with his employer, but have you had any instance of a man being dismissed or harshly treated on account of his having produced an unfavourable report with regard to the mine ?—There has been no instance in Nottinghamshire so far as I know ; in fact there have only been two of these inspections made so far as I know.

20262. During the whole time you have been there since 1889 ?—Yes, I have only heard of two inspections being made at two different collieries.

20263. You think part of the reason they are not made is that the men are generally afraid, if they give an unfavourable report, it will go against them ?—I do not know that men are generally afraid of that, but this enters into this question.

20264. Have not men told you they are afraid ?—No.

20265. What reason have you to suppose that they would be afraid ?—I do not know that they would be afraid, but they simply say that it might be used against them.

20266. They do not know of any instance of it having been used against them, but they have some sort of dim notion, which apparently there is no substantial ground for, that if they give an unfavourable report, it might go against them with the mine officials ?—Yes: if you will excuse me I would like to say only some two or three months ago the men of a particular colliery were talking this question over and the committee was divided

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in opinion as to whether an examination should be made or not. Part of the committee were opposed to it being made, and they urged this as one of the reasons, and the inspection was not made.

20267. Then you say that an unfavourable report might also be detrimental to a man making it as a co-worker. You mean the other men might object ?—Yes.

20268. Why would they object to a report he might make ?—His report might be unfavourable so far as some particular stall or district was concerned.

20269. Then he would get himself into hot water with the men working at that stall ?—The men in that stall or district, as the case might be, would very likely resent his unfavourable report.

20270. As you have only had two inspections during the time you have been in your present position, you have had no experience of that being the case ?—No.

20271. Then you say that the men really are incapable of making an inspection that is worth much. That is what it comes to. In paragraph 6 you say that such examinations must in every case be to some extent superficial and incomplete because these men do not understand and cannot measure ventilation, cannot read plans, indeed have little or no opportunity for seeing them. Surely there are men in the mines who hold even a first-class manager's certificate ?—Yes, we have men here and there who have done that.

20272. Surely they are capable at all events of reading plans and roughly reading ventilation ?—I am speaking of the general body of men.

20273. You would not entrust this inspection to an ordinary uneducated miner ?—No.

20274. You have men in your districts who hold first or second-class certificates ?—Yes.

20275. Would they not undertake this inspection and be competent to do it ?—I do not know. It would depend upon one or two things. In the first place I am convinced that there are not enough men in every colliery who have passed those examinations and hold those certificates. In the next place these men would not be selected in all probability by their fellow men.

20276. Why not ?—I do not know why. They may be or may not be selected.

20277. Surely there must be several men in your mines who have these certificates ?—There are.

20278. How many ?—I could not say. I have no idea.

20279. Quite enough I should think to carry out these inspections ?—I am inclined to question that.

20280. How many would you want to carry out these inspections ? How often should you suggest that the mine should be inspected by the men ? What would you consider to be a reasonable amount of inspection ?—I do not know that I can make any suggestion upon that point, but I think it would require at least two at every colliery.

20281. Who should be deputed for that duty ?—Yes.

20282. Surely you could always get two sufficiently educated to understand about ventilation and plans, could you not ?—I question that.

20283. You mean you are not sure that at some collieries there would be found even two men who had got the certificates ?—I do not think so.

20284. Then you say that the condition of the mine at the time of the accident may be very different to that at the time of the inspection. Still, at the same time, inspection is very desirable. It is not a reason I should have thought for not having inspection. In paragraph 7 you say that mines are managed much better now than they were, consequently there is not the necessity now for these inspections, and you also say there is not and never was, so far as your experience goes, any great desire on the men's part to make these inspections. That is even when they had much less confidence in the managers than they have now, they did not think it worth while to make these inspections, or, at all events, they thought there were such drawbacks to making these inspections, or that they got into such difficulties through making them, that it was not worth their while to make them ?—I am speaking of the last 30 or 35 years, and during that time there has not been to my certain knowledge a general wish, so far as the Notts miners are concerned, to make these inspections.

20285. That was apparently because they did not consider the inspections were necessary, but I understand that the principal reason was that they might get themselves into hot water either with their own workers or with the mine officials if they did make the inspections ?—I cannot say that that was the principal reason, but all the reasons I have given enter into the business and undoubtedly are reasons why these inspections have not been made.

20286. What do you say is the principal reason of the want of desire on the part of the men to make these inspections ?—I think the principal reason is indifference.

20287. With regard to General Rule 4, that is the inspection by officials, you say that the deputies and the shot-firers do not make the systematic examination of the mine they ought to do ?—They do not make the systematic examination I think should be made.

20288. How is that ? To what do you attribute their not doing so ?—I know that in some cases they will enter in at one gate and pass along the faces and down another gate leaving the intermediate gates not examined so far as they are concerned, and the shot-firer is expected to examine those gates, but he, generally speaking, acts in the same way as the deputy has done.

20289. In the case of the shot-firer and probably in the case of the deputy they do not do the duty, as a matter of fact, that they are supposed to do, and the duty that is entrusted to them ?—They do not go in and out along every gate or travelling road.

20290. Do not the managers of the mines make enquiries as to how the deputies understand their duties and the firemen understand their duties, and keep them up to the mark ?—Those enquiries undoubtedly are made and they know they understand their duties, but the men themselves report to me that that is the way in which they discharge their duties, and there are gates here and there which are not examined.

20291. When you get this information from the men do you not hand it on to the mine manager and ask him to see that the deputies and firemen perform their duties ?—I have not done so.

20292. Do you not think it desirable to go to the managers and explain the matter to them ?—I think it would be, but that evidence I only had last week.

20293. You get that evidence from the men and do not hand it on to the managers ?—I said I only got it last week.

20294. All the time you have been there you have not known of this alleged dereliction of duty by the deputies and the firemen ?—No, I have been to two or three collieries and questioned the men on this particular point and they tell me that is how the duty is discharged.

(*Chairman.*) You seem to be a long time in finding this out.

20295. (*Mr. Wm. Abraham.*) Do you think that the manager would accept you as an instructor ?—I do not suppose that he would.

20296. Do you not think he would strongly resent any interference on your part ?—Probably.

(*Mr. Ratcliffe Ellis.*) This is not a checkweighman.

(*Mr. Wm. Abraham.*) I know it is not.

(*The Witness.*) It would probably be resented and it would not be a very pleasant thing to do.

(*Mr. F. L. Davis.*) This information has not been known for long. It has only just been got up for this Commission within the last week. It has only been found out within the last week.

(*Chairman.*) Supposing that a manager might resent any interference on your behalf or any suggestion you might make, would not the manager be very glad to get information, at all events, from the men themselves, or the inspector, or any official of the mine. Would not the men, for instance, tell the inspector that they thought the fireman and deputy did not carry out their duties ?

(*Mr. Ratcliffe Ellis.*) Why could not the witness tell the inspector ?

20297. (*Chairman.*) You could tell the inspector without going to the manager. You might do that or the men might do it themselves ?—Yes.

20298. Or the men might tell the managers. I suppose the men would not like to go to the managers and, so to speak, peach upon their comrades ?—That was one of the questions you put on the list you sent to me, and it was after receiving that list and getting to know the points I should be questioned upon that I got this information.

20299. You say you have received this information from a good many men ?—From a considerable number of men.

20300. That in the opinion of the men the deputies and the firemen do not perform their duties properly ?—They do not examine every gate or travelling road.

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20301. It is part of the duty of the deputy or the fireman, to examine every gate, and that they do not do?—No.

20302. The firemen should be men of practical experience, that is men who have worked in the mine. Is not that usually so?—Yes.

20303. Do you know any case where it is not so?—I have heard of cases, but not recently.

20304. You think it is understood by the mine managers that the firemen must be men of practical experience?—Yes.

20305. Then as regards discipline, fines and prosecutions, you say generally speaking the men are opposed to any recognition of a system of fines. Do you find as a rule that the men would rather that their fellow workmen were prosecuted than fined?—No. What I mean is this, that generally speaking the men are opposed to any general system of fines being adopted between the workers and the employers, but they do not object here and there to people being fined who have done wrong and the offence can be met by a fine. They do object to anything like a general and collective recognition of the system.

20306. How would the men propose that discipline should be kept up in the mine? Would they prefer prosecutions to any general system of fining?—No; they think that discipline can be kept up without any general recognition of the system of fines.

20307. Or prosecution?—Fines or prosecutions.

20308. In what way would you keep up the discipline if you have no system of general fining, and hardly any prosecutions? Occasionally men would naturally say in their own interest that a workman should be prosecuted?—Yes.

20309. If there was any grave dereliction of duty it would be to their interest that he should be prosecuted?—I am not saying that there should not be fines or that there should not be prosecutions, but only at a very few of the collieries in Notts is there a general system of fines agreed upon, and still I think the discipline is kept up fairly well.

20310. How is the discipline kept up—by prosecutions?—Prosecutions and fines.

20311. I suppose the opinion of the men as to prosecutions would be that in very serious cases it would be in their own interest that a man should be prosecuted and not fined?—Yes.

20312. Supposing that the offence was not very serious, they think perhaps it would be met by a reprimand?—Yes, followed by a fine, very likely, if it was repeated.

20313. Then as regards the establishment of Special Rules you think that workmen could with advantage be asked for their opinion when Special Rules are being prepared; that is to say, that you would not have any Special Rules go so far as to be put forward by the mine owners until the matter had been threshed out between the mine owners, managers, and the men. You would have a sort of preliminary meeting, when the managers would suggest to the men the kind of Special Rules they wanted, and the men would consider those rules, and you think that no rule should be formulated or go so far as to be printed, perhaps—at all events should not be enforced—until the men had an opportunity of considering them?—Yes, I think that is a fair way of putting it.

20314. No Special Rule should be enforced—enforceable we will say—until the men had had some opportunity of objecting?—That is so.

20315. And you think that objections should be heard?—Yes.

20316. Before the rule is enforceable?—Yes.

20317. Then you say that you are in favour of some of the Special Rules being put into the General Rules, especially those relating to machinery, shafts, signals, managers, under-managers, deputies, and perhaps lamps and explosives. That is rather a considerable question?

(*Mr. Ratcliffe Ellis.*) Those are now provided for in the General Rules.

20318. (*Chairman.*) There are General Rules applicable to all these matters. I suppose your position is this, that the General Rules are not sufficient, that in almost every district it has been found necessary to supplement them by Special Rules, and there are certain Special Rules that are so generally necessary that they might very well be applicable to every district, and probably it would be found out, on comparing the Special Rules, that there are some Special Rules that are enforced in all the districts?—That is just what I had in mind.

20319. Can you suggest any particular Special Rules that are in force in your district that should be made General Rules?—None, excepting the ones that I have already referred to, the ones you have just read.

20320. "Relating to machinery": that is a mere general proposition with regard to the kind of matters that should be dealt with by General Rules. Do you suggest, for instance, that all the rules that you have in your district relating to machinery are so excellent and unobjectionable that they can be put into an Act of Parliament and made General Rules all over the country?—No, that is not my suggestion. I think that there are Special Rules relating to all those matters that are of such general application that they could be put in the General Rules.

20321. Some of them?—Yes; I do not say all.

20322. I was asking you to point out any particular rules which you think might be made General Rules. Have you any in your mind?—I have not any particular rule.

20323. You have not thought the matter out?—No.

20324. As regards haulage, you would like to have, separate travelling roads wherever possible. I suppose in an old colliery that would often be an extremely difficult and expensive matter?—I know one or two old collieries, very old, where they have separate travelling roads, viz., one I worked in.

20325. You think on account of the nature of the strata it would often be difficult to have a separate travelling road, I suppose?—Yes.

20326. By "wherever possible" you mean where the expense would not be prohibitive?—Yes.

20327. Do you think on one side at least in the whole district there should be plenty of room to walk? With regard to that it has been pointed out to us that sometimes where there is plenty of room to walk, the road may be very dangerous because this pathway that ought to be free and ought to enable men to step off the line at once into safety is often filled up with rubbish and débris in such a way that the men cannot walk along it?—Yes.

20328. Is that so in your district?—I cannot say that it is.

20329. You have not noticed that?—I do not think it is.

20330. You say that it would be a great advantage to have the refuge holes whitewashed on the edge and inside. That, I believe is generally done?—It is in our district.

20331. Perhaps you would suggest that that might be made a general rule, that all refuge holes should be whitewashed, and put it into the Act of Parliament?—It would be an advantage, I think.

20332. Do you think it is a matter of sufficient importance to be put into an Act of Parliament and made compulsory?—It is an important matter, but that it is sufficiently important to be made a general rule I would not like to say.

20333. I suppose the expense would not be great?—No.

20334. Then you say that roads should be as straight as possible, that the dip should be as regular as possible, hills and swamps being avoided. I suppose those are all things that should be looked to. In paragraph 13 you say you think that drags should be compulsory. What do you mean by "drags"—things to stop the trains going downhill?—Yes.

20335. (*Mr. F. L. Davis.*) It is a piece of iron sticking out behind the trams?—They are called "daggers" in some parts, and "drags" in others.

(*Mr. F. L. Davis.*) They are called "devils" in some places.

20336. (*Chairman.*) Here is a Lancashire Special Rule, which seems to meet your proposal: "Where the manager directs, the trailer or devil must be attached when the full load is drawn against the incline by means of a single rope or single chain other than a "lashing chain." That is merely where the manager directs. That means it is in the power of the manager to do it or not as he pleases. Would you suggest that in all cases the trailer or devil must be attached when the full load is drawn against the incline?—I think it ought to be done.

20337-8. You think it might be made obligatory instead of being in the discretion of the manager. Another Rule is, "Stop-blocks, warricks"—what is a "warrick"?—

(*Mr. Ratcliffe Ellis.*) It is something to enable the tubs to be stopped.

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(*Chairman.*) "Loose rails or other safeguard shall be provided at the top of all jigs to prevent the trams accidentally running down, and the persons whose duty it is shall use the same." There, apparently, this must be done: it is not in the discretion of the manager. Would you suggest that this 50 (b) new Rule, Lancashire Special Rules, might be made a General Rule: "Stop-blocks, warricks, loose rails or other safeguard shall be provided at the top of all jigs to prevent the trams accidentally running down, and the persons whose duty it is shall use the same?"—Yes.

20339. You think that might be universally applied all over the country?—I do.

20340. That would, to a great extent, meet your point?—Yes.

20341. Then you say that over-chains should be used to check or stop any runaway trams, and competent persons, not inexperienced boys, should be employed. Over-chains are very often used, I believe. Do you think their use should be made compulsory where there is a train of trams, more than one tram going along the road?—Are you speaking of trams loaded with coal?

20342. Yes.—I do not know that I am prepared to go as far as that. I think they should be used where the men are riding in the trams.

20343. Do you find that any inexperienced boys are employed with these trams?—Yes.

20344. What aged boys are employed?—Boys commencing to work in the pits.

20345. The first thing they do is to go with these trams?—Yes, in some cases.

20346. Before they understand the danger?—Yes.

20347. On the other hand it would be desirable, probably, to have active young men employed in that duty, as the older men might not find it so easy to get out of the way. The younger you are the more active you are?—Yes; but if a boy commences to work in a mine at 14 years of age and has a year at other kinds of work, and gets to know something about the inside of the mine before he is put on to this dangerous work, I think it is better.

20348. You do not object to boys under 17 or 18 who have been at work in a mine a considerable time and who understand underground matters, being employed to look after these trams, but you say that boys ought to be employed at least a year in some other kind of work to accustom themselves to underground work before they are employed on these trams?—Yes.

20349. Then you say that each person should know his own work and be responsible for it, so that there may be no unnecessary division of responsibility, and that the engineman especially should not have any other duty. What duties does he perform at present which would interfere with his duty as engineman?—I cannot give any case of that just now, of that responsibility being divided. I have no case in mind, but I have heard more than once of enginemen being called upon to do other work that has taken their attention off their own particular work.

20350. What sort of enginemen?—A haulage engineman.

20351. (*Mr. F. L. Davis.*) Underground?—Yes.

20352. (*Chairman.*) A haulage engineman underground is sometimes taken away from his work and made to do something else?—Yes.

20353. Do you know whether that is a common practice?—I have known them called away to do their firing.

20354. (*Mr. Smillie.*) That is on the surface?—No, underground.

20355. (*Chairman.*) Do you mean firing shots?—No, putting slack on the fires.

20356. (*Mr. Enoch Edwards.*) Stoking?—Yes.

20357. (*Mr. Ratcliffe Ellis.*) In what part of the mine is the boiler?—In the pit.

20358. (*Mr. F. L. Davis.*) Whereabouts in the pit?—300 yards from the pit bottom.

20359. (*Mr. Ratcliffe Ellis.*) Were the men at the end where the engine is?—He would be some yards away from his engine. He would have to go round to his boiler to the other end of his engine-house.

20360. (*Chairman.*) How far—100 yards?—No, perhaps 50.

20361. You have known a man called away for stoking work 50 yards away from his engine?—Yes.

20362. Which he ought to be attending to, and you think that he ought always to be on the spot?—Yes.

20363. Have the men made any complaints to the manager upon that score?—Not that I know of.

20364. You do not know what the managers would say to that?—No. I have seen it done.

20365. You know yourself that it has been done?—Yes.

20366. Then in paragraph 14 you say, as regards other classes of accidents, that mine officials should be the only persons allowed to carry explosives, that they should fire all shots, recover unused or miss-fire explosives, and account for all that they receive. It has been suggested to us that the same person should not fire the shot and take down the explosive, but that there should be two different persons, one to take the explosive and the other to fire the shot?—Yes.

20367. Do you think that that would be a proper precaution, that in no case should the man who fires the shot take the explosive down into the mine?—Would they both be shot-firers?

20368. They would both assist at the firing, and to some extent the one would be a check on the other in case any one of them were to infringe the rule. There would always be two persons concerned in the shot-firing?—That does not come into conflict with what I have submitted, does it?

20369. No, you do not go so far as that. You say mine officials should be the only persons allowed to carry explosives, they should fire all shots. Therefore, according to you, you see no objection to a mine official taking down an explosive and firing a shot himself?—No.

20370. Then with regard to miss-fires, would you have any General Rule prohibiting a man from going to the place of the shot-fire for a certain time after the miss-fire had taken place? Would you say, for instance, that he must not go near the place for half an hour, or for some considerable time, in case the miss-fire shot should go off?—I think it is not advisable for him to go to the place again directly after, and I do not think they are allowed to do so.

20371. However, you have not thought that matter out?—No.

20372. Then you say that shot-firing should be done between shifts, especially in deep, fiery, and dry and dusty mines. Could you arrange for that throughout Nottinghamshire? Could that be done without seriously impeding the working of the mine?—I do not think that there are many pits in Nottinghamshire that would come under the designation of deep, dry, and dusty; perhaps the Leen Valley pits would, but comparatively speaking there is no shot-firing there. What there is is done between the shifts.

20373. So far as shot-firing is concerned, in your district you do not consider that anything further need be done with regard to making it compulsory, except that shot-firing should be done only between shifts?—We have no room to complain upon that point, I think, in Notts.

20374. In paragraph 15 you say that winding-enginemen might be compelled to obtain certificates of competency. What sort of examination should they have?—I do not know that I could define the kind of examination; I am not an engine-winder.

20375. As a matter of fact, do you find that the winding-engineman does not understand his duty sometimes?—No.

20376. An incompetent man is sometimes appointed?—No, not that I know of.

20377. You have no knowledge of that?—No.

20378. You consider enginemen as a rule are quite competent to perform their duties?—Yes.

20379. In fact you do not know of any instance where they are not competent?—No, I do not know of any.

20380. Then in paragraph 16 you say that detaching hooks and safety catches should be provided. No doubt there are types of detaching hooks and safety catches which are usually provided. Do you think it might reasonably be made compulsory to provide detaching hooks and safety catches?—I do not think they are usually provided in Nottingham.

20381. They are in some parts?—In some parts they are.

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20382. Do you think it would be reasonable to make it compulsory that they should be provided?—I know that there are objections to them in some places, but I think after all that they should be compulsory.

20383. You think they might be made compulsory?—Yes.

20384. Then you say that appliances for shutting off steam, applying brake and stopping engine at a certain point in case the engineman fails to do so, should be provided. There are appliances of that kind that are to a considerable extent, I believe, provided. Would you also make it compulsory that these appliances should in every case be provided?—That is a point that I do not think I can say much about. I read an article in the "Iron and Coal Trades' Review" upon this particular appliance. I do not remember much what it said, but it struck me that it was a very fine invention, and might be used with advantage.

20385. You have not gone very much into that matter?—No.

20386. (*Mr. F. L. Davis.*) Was that shutting off steam when the cage gets to a certain position?—Yes; I think it was called an "arrester."

(*Mr. Smillie.*) Bertram's, I think it is. If you think it is a good thing, why do you not think it would be well to recommend it as a general thing? You would not be prepared to give an opinion as to whether it should be provided or not?

20387. (*Mr. Ratcliffe Ellis.*) He is cautious; he does not want to recommend a thing unless he is sure that it is a good thing.—I put that qualification in; I do not know much about it; I have not seen it, and my only recollection which is a dim one, is an article I read in a mining journal upon this particular matter.

20388. (*Mr. Smillie.*) You have not seen it in practical use?—No.

(*Chairman.*) In paragraph 17 you say that wastes should be filled so far as dirt will do this, and no dirt brought to bank unnecessarily? I suppose that would be the rule in all collieries, that dirt should not be brought to the bank unnecessarily. That is rather a checkweighing matter, is it not, that they send dirt up unnecessarily?

(*Mr. Wm. Abraham.*) It is not the same question at all.

20389. (*Chairman.*) It is rubbish which has to be sent out. If it can be stowed away underground it should be?—Yes, that is my point, they bring it out sometimes because it is near to the pit bottom, and they can bring it out at less cost than put it into the workings.

20390. (*Mr. Ratcliffe Ellis.*) It affects safety?—Yes, that is my point, it affects the safety of the mine.

(*Chairman.*) As far as possible it should be stowed away underground and not brought to the surface.

20391. (*Mr. Wm. Abraham.*) Places are left empty which could be filled with this rubbish that is sent out. Where gas is it would accumulate in that place?—The wastes are not filled in some cases. There is plenty of room in the wastes for this dirt and rubbish, but instead of being drawn into the working faces and stowed there, it is put on to the cage and sent up, because the dirt happens to be near the pit bottom.

20392. (*Chairman.*) Then you say that iron trams are safer than wooden ones, especially in fiery mines. How are they safer?—I think they will not carry the dust.

20393. The dust does not so easily shake out of an iron tram. Is it more dust-tight?—I think there will not be the dust to shake out; the wood would carry more dust than the iron, would it not?

(*Chairman.*) That is rather a question as to whether the wood is well seasoned.

20394. (*Mr. F. L. Davis.*) It is less likely to crack and break you mean?—Yes.

(*Mr. Ratcliffe Ellis.*) The dust must be there; the iron probably will not be better than the wood.

20395. (*Chairman.*) In paragraph 19 you say that the employment of unskilled labour is dangerous, and should be discouraged. You mean that unskilled persons should not go to the working places?—That is so.

20396. Particularly with regard to timbering. A man ought to know something about timbering before he is allowed to go to the working place?—He would know something of timbering before he went to the working place, but what he had learned about it would be learned on the main roads

20397. With regard to timbering, do you suggest that it should be the duty of some mine official to go round to the working places constantly with a view to looking after the timbering, advising a man as to what he should do with regard to the timbering, at all events, if an inexperienced man?—No, I do not know that I suggest that; in fact, it is to some extent done now with regard to all the men.

20398. You have nothing to complain of in the way of the men being too much left alone in the matter of timbering?—No.

20399. Then you say that ambulance proficiency should be encouraged on the part of the officials and workers. I think that we all agree as to that. Then with regard to the investigation of mine accidents, you say that coroners in your district are all that could be desired, and that the relatives of deceased should have ample and clear notice of *post-mortem* examinations. Is that not so? Have you any complaints to make upon that point, that the relatives do not have sufficient notice?—We have had two cases quite recently where men had been killed, a man in each case, and the relatives of the deceased did not know that any *post-mortem* examination was being made until I told them at the inquest.

20400. How are they to know? How are persons who hold the *post mortem* to know who are the relatives? How do they find out?—In both of these cases the body was at home.

20401. It was known, and they deliberately did not send any notice to those persons well known to be relatives.

20402. (*Mr. Ratcliffe Ellis.*) You say that the body was at home?—Yes, it was at the house of the relatives. In one case the *post mortem* was made at home, and in the other case the body was removed, and in both cases the relatives did not know that a *post mortem* had been made until the inquest was held

(*Chairman.*) You mean relatives outside the house?

20403. (*Mr. Ratcliffe Ellis.*) Perhaps you mean in the house; the doctor came and they did not know what he was doing?—They did not know what he was doing. The coroner sent a doctor, and the colliery company sent a doctor, and in both cases the relatives of the deceased were not medically represented.

20404. (*Chairman.*) Even the relatives in the house did not know what was going on?—They did not know what was going on.

20405. Do you suggest any alteration in the law?—I do not know that I can suggest any alteration in the law, but I do think that it is very necessary that the relatives should be clearly informed that a *post-mortem* examination is going to be made, so that they can have the same opportunity of being medically represented at it as the employers have. The relatives of the deceased, generally speaking, are not so well educated as the employers, and the matter has to be put very plainly to them before they understand what it means.

20406. I suppose it is only in very exceptional cases?—They are exceptional, but we have had those two quite recently.

20407. It is not a great dereliction of duty on the part of the coroner, or whoever ought to give notice?—I think it was the constable and not the coroner.

20408. The constable ought to have told the relatives. It was his duty to tell the relatives, and he did not perform his duty. It was a case of an inferior officer not doing a statutory duty?—He did not make them understand what was going to be done.

(*Mr. Cunynghame.*) I think it is a matter of discretion; do not think it is a statutory duty.

(*Mr. Ratcliffe Ellis.*) I should think this case arose in connection with the Workmen's Compensation Act. That is where the difficulty arises sometimes.

20409. (*Chairman.*) Probably cases of that sort might be met by a circular being sent round to coroners (if those cases were at all frequent), telling them that they ought to take some steps to let the relatives know what was going on?—Yes, in one case the man had been injured by being struck on the head by a piece of stone thrown by another. It was quite accidental. In the other case the man ruptured himself; he was turning over some chains they were annealing and died a fortnight after; and in neither case were the relatives of the deceased represented medically at the *post-mortem* examination.

20410. (*Mr. F. L. Davis.*) Those cases were quite exceptional?—They were exceptional I am pleased to say.

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20411. (*Mr Cunynghame.*) You would not like it to be made compulsory to send round to a widow a thing of that sort abruptly? You would not like to make it statutory? Giving notice to the relatives ought to be done a little judiciously, that is what I feel?—Yes, I feel the same.

20412. Can you suggest anything so that it should not go abruptly to the widow? It might go to the nearest male relative or something of that kind. If you make a law it has to be obeyed, and it might give great pain without a correlative good?—That is so. I do not see how it can be met by any statutory law, but I thought it was wise to mention the matter to you because they are unpleasant incidents we do not like to have.

20413. (*Chairman.*) Then as regards any further enquiry under Section 45 of the Act, you think anybody desiring an enquiry should be able to ask for one as of right?—Yes.

20414. That if any person interested thinks that the coroner's inquest has not, for instance, brought out all the facts that ought to be brought out you think that power should be given to any single person, however much interested he might be in the matter, to compel the Secretary of State to hold another enquiry?—When you say an interested person you mean a person interested on either side?

20415. Yes?—I think, if an interested person has reason to think that all the facts have not been brought out, and that an enquiry is necessary, it should be made.

20416. So that any person, in your opinion, supposing he was interested in the matter, and thought, or anybody else thought, that the facts had not been properly brought out, should be empowered to compel the Secretary of State to order another enquiry?—I do not know what you mean by any one interested person. All that I have in mind, just now, are the employer, on the one hand, and perhaps the widow it may be of the deceased on the other hand, or an organisation that the deceased was a member of.

20417. We will say then that if a widow thinks that all the facts have not been brought out, although she may in point of fact have nothing to go upon, but still if she wishes to have a further investigation, it should be compulsory on the Secretary of State to order one?—I think so. I think it is necessary to have all the particulars and place the matter beyond dispute, if possible.

20418. The last paragraph is about safety lamps. You say they are inconvenient, I suppose, because they do not give so much light as other lights. You also say they are injurious. In what way are they injurious?—They are injurious to the sight more particularly.

20419. Is that so?—Yes.

20420. What evidence have you got in support of that contention?—At present we have trouble with nearly every colliery owner in Nottinghamshire because so many men have had to come out of the pit owing to failing sight, and they have a difficulty in finding work on the top.

20421. Is this a new thing?—No, it is not a new thing.

20422. There is a disease?—It is nystagmus.

20423. We have had some evidence already, I think, about this disease, and it seems to be an open question whether it is caused by the dimness of the light or by a man working in a particular position?

20424. (*Mr. Enoch Edwards.*) Or both?—Or both.

20425. (*Chairman.*) That is what you mean by injurious, that it produces this particular disease?—Yes.

20426. You say the use of them should not be unnecessarily extended. There is a great deal in the word "unnecessarily." Do you think that the use of safety lamps is unnecessarily extended in your district?—I do,

20427. There are certain mines where safety lamps are in compulsory use, and you think, in some cases, that is unnecessary?—I do.

20428. I think the mine inspectors are of a contrary opinion. The drift of the evidence of the mine inspectors was that safety lamps were not employed in all cases where they ought to be?—That is so: that is their opinion.

20429. You put your opinion against theirs?—Yes, it may be presumption on my part, but I think they are in some pits where they ought not to be.

20430 On account of their producing this disease, and on account of it being less pleasant to work with safety lamps than with naked lights?—Yes, and, I think, the pits could be ventilated quite sufficiently to make them safe to work in with a naked light.

20431. You think that in some pits where safety lamps are compulsory that the ventilation might be so much improved that they might, with safety, use naked lights?—Yes.

20432. You have in your mind cases?—I have in my mind cases now of collieries near to where I live. The manager has given evidence before this Commission. I do not think lamps were really necessary in his pits.

20433. Even without further ventilation?—I do not think the manager himself, really believes they were necessary.

20434. Even without further ventilation they might be very well disused?—Yes, I think they could. I am not here to say his pits are badly ventilated. They are not badly ventilated, they are well ventilated.

20435. In some parts where the ventilation is not, perhaps, so good as it might be, it may be necessary, at present, until the ventilation is better to have safety lamps, but it might be improved so much that they would no longer be necessary?—Yes, I think that is possible in some cases.

(*Chairman.*) I think we all agree that they should be securely locked and thoroughly tested.

20436. (*Mr. Cunynghame.*) I should like to ask you about two points: the first point that I admit is puzzling me a good deal is the fine question. Of course, we must all concede that there must be discipline in mines where the safety of everybody is concerned. That is even more necessary than it would be in factories and places of that sort?—Yes.

20437. In mines it is particularly necessary?—Yes.

20438. I should imagine that the chief objection of the men to being fined was that the fine was inflicted by somebody belonging to the management and who is, as it were, judge in his own cause. Is that the real root objection of it?—Perhaps I did not make myself understood upon this point. My only point was this: the men do not object to being fined when an offence has been committed that will justify a fine, and I do not say that they should not be prosecuted if the offence merits a prosecution, but the men object to entering into an agreement with their employers whereby a system, or scale of fines is adopted. There is only one set of collieries in our county, that I know of, where that has been done, but fines are inflicted at every colliery.

20439. I do not think I have followed you thoroughly. Do not think I am asking you this antagonistically, because I only want to bring out all the facts as well as I can. If one does not object to a system I do not see why you should object to agreeing to the system. If the system is to exist, it is better that the men should have the option of agreeing than have it made against their will. Do you see my point at present?—Yes.

20440. If you do not object to the fines being levied I do not see much objection to making the men agree to them. I have not quite caught the meaning of that point?—The men would rather the matter remain as it does at most of the collieries in this way: there has been no agreement arrived at between the employers and the men concerning any fines that shall be inflicted in any case, but if a man does wrong a suggestion is made that he should be fined. Perhaps the manager makes it, and the men and managers are left very much to themselves to agree what the fine shall be.

20441. (*Mr. Ratcliffe Ellis.*) I think he means that it should be no part of the contract between the employer and the workman that he should be fined for certain offences. If he does commit an offence, both parties should agree to a fine for that particular offence. You see no objection to that? That is your view?—Yes, I see no objection to that.

20442. (*Mr. Cunynghame.*) The system you would advocate would be this: that it should be left to the two parties, always optional to the man to pay a fine instead of being prosecuted?—To some extent it is.

20443. Without a previous agreement that it should be open to the man who was about to be prosecuted to go to the manager and say that he would rather be fined instead of being prosecuted?—Yes, in some cases the offence can be met by a fine. If a man is in a good place, doing well, and is a good workman, and has committed a trivial offence, he may not have done it intentionally—that is a case we think a fine would meet.

20444. I was not endeavouring to get any admission that the men did not want to make. I wanted to know their real view, whether they object to the system of fines, or whether there is any system they would think reasonable and good?—The men have no general objection

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that I know of to being fined where they have done wrong, but they have a very strong objection to an agreement being made with their employers.

20445. You mean a previous agreement ?—Yes, the same as we have at the collieries I previously referred to, where a list of fines has been agreed to by owners and workmen.

20446. They do not like a code of fines ?—No.

20447. They acquiesce in and prefer the option of paying a fine rather than being prosecuted in any particular case which arises ?—Yes. Then the men sign a document to the effect that they are willing to pay this fine.

20448. (*Chairman.*) Each case is decided on its own merits ?—Yes. If an offence has been committed and the owner and the man agree that it can be met by a fine, and the man is willing to pay a fine, say 2s. 6d., he simply signs a document saying that he is willing to pay this fine.

20449. (*Mr. Wm. Abraham.*) Is there not a poster hung up at the top of the pit explaining all that, before anything of this kind is done ?—I do not think there is.

20450. (*Mr. Cunynghame.*) At all events, that system, you think, does act well upon the whole ?—It does act well upon the whole in the opinion of our men in Nottinghamshire, and they do not desire any alteration. I am not authorised to say that they do.

20451. I suppose the complaint you were telling us about, that the men get by working in mines, is miners' nystagmus? —Yes.

20452. They get that with naked lights as well as with lamps sometimes ?—I do not know of any case where they work in naked-light pits.

20453. It is mostly lamps, I think everybody admits, but I think there are some with naked lights. You do not know, perhaps, about those ?—Nystagmus may arise from more than one cause. There is no getting away from this fact : our men suffer from it a great deal more where there are lamps than where there are not.

20454. I think that is conceded. I have heard a good deal of evidence upon that. I see a little difficulty from an administrative point of view in giving a second enquiry where there has been a coroner's inquest, which I will suppose in the opinion of all reasonable persons had thoroughly done the job of finding out everything. It seems to me a little injudicious to give to another person whose relative might have been injured a right of having what would be a somewhat extensive and expensive enquiry. Does it not seem to you that the object of the second enquiry is not so much to go into the details of that accident as to provide how such accidents can be avoided in future ? Does that not seem to you to be the case ?

20455. (*Chairman.*) The work of a coroner and a jury is to fix the blame on particular people, and after all the chief object of an enquiry afterwards is that you go into some general question of engineering which is of a wider character than the mere detail of that particular case ?—I am not aware that I went so far as to say every person, but if I did, what I had in my mind was this : I am not anticipating that anybody would ask for an enquiry of this kind who had not some standing, in a manner of speaking, or some authority, and I said the employer might ask for it, or I think some of you said the employer, or the widow of the deceased, or an organisation of which the deceased was a member.

20456. (*Mr. Cunynghame.*) For instance, where the coroner's jury had found a verdict of blame against the manager, I do not know that necessarily he ought to be able to demand an appeal as a right. Take a case of that kind. The jury have heard the case, and I do not know why it should be given as a right without convincing anyone that it was reasonable. In every case he would have a shot at a second enquiry to see whether it was better for him, but I do not see that he ought necessarily to have a right. It does not appear clear that you ought to give him an appeal in every case, whether reasonable or not?—All I have in mind is this : where any good purpose can be served by a second enquiry being given, it should be granted, but it is a difficult matter to say when the good purpose exists.

20457. Perhaps your real point is (it is my impression, rightly or wrongly) that the powers of giving subsequent enquiries to coroners' inquests might have been more liberally exercised in the past ?—I cannot call to mind any case where it has not been exercised when it might have been with advantage, but I think that the power ought not to be narrowed down at all.

20458. Do you not think, after all, that a Secretary of State, responsible to Parliament, is to be trusted with saying whether an enquiry should take place or not ? I suppose you must trust somebody ?—Yes.

20459. I want to put it candidly and fairly to you. After all, you cannot call to mind that he has done very great wrongs in the past apparently ?—No, it is difficult to say that a Secretary of State should not be trusted, but on the other hand I can quite understand a Secretary of State refusing to instruct the holding of an enquiry of this kind when it would perhaps be best for it to be held.

20460. He might make a mistake ?—Yes.

20461. But you are going to give in 1,000 cases in a year a right to relatives to put him right, and it seems to me that is a big order. You are going to give it to the owner, to the relative or anybody interested, and it seems to me a big order. That is what I mean. Have you an idea, if that was exercised to any large extent, what that would cost in money ?—I do not know. I did not intend to suggest that there should be more done than has been done in the past in that respect.

(*Mr. Cunynghame.*) Then it must be for the Commission to think how the question should be met. I do not want to press it.

20462. (*Mr. Ratcliffe Ellis.*) With reference to inspection do you agree with the view that was put before the Commission by Mr. Richards yesterday, that the object of the inspection by the inspectors is to see that the Mines Act is being carried out ?—Yes.

20463. It is not to manage the colliery ?—No.

20464. You think that each pit should be inspected twice a year at least ?—Yes.

20465. And that every part of the pit should be inspected ?—Yes.

20466. I suppose you mean every part at work ?—Yes.

20467. And accessible ?—Excuse me, every part at work and accessible. Some would be accessible and not at work. I think every part in which it is possible for a danger to lurk should be inspected.

20468. Would you inspect the goaf if you could get into it ?—No.

20469. You would inspect the working parts of the mine ? —Yes.

20470. And places contiguous thereto ?—Yes.

20471. You know the conditions down a pit vary very considerably ?—Yes.

20472. And vary at much shorter intervals than six months ?—Yes.

20473. Every week probably ?—Yes.

20474. What advantage would you expect to gain from that inspection every six months, considering the varying conditions of the mine day by day ?—I do not know that I can say what advantage we should gain, but I think we should certainly gain an advantage. I think we gain some advantage now by inspection.

20475. I should like you to remember the varying conditions of the pit day by day. What advantage would you expect to gain by an inspection every six months ?—We should gain the advantage of knowing that the mine had been well inspected by a disinterested person, and we should have the advantage of his report thereon.

20476. Would the examination you suggest every six months be by the Chief Inspector, or would you be satisfied with one by one of the Assistant Inspectors ?—I presume it would be by any of the persons appointed.

20477. Any of the staff ?—Yes.

20478. You say that men think their examination—this is with reference to the men's examination—tends to relieve managers of a responsibility. Do you not think that a too frequent inspection by inspectors would have the same effect ?—It may have.

20479. Do you not think it would ? Can you see any reason why it would not have the same effect ? If the men think an inspection by their body relieves the manager from responsibility, can you see any reason why it should not also follow that too frequent inspection by the inspector would have the same result ?—I am not prepared to say that it would be too frequent if twice a year.

20480. We will discuss frequency afterwards, but can you show any reason why too frequent inspection by the inspectors might not have the same result, removing from the responsible manager the feeling of responsibility ?—

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It would very likely ease his position, but he would still remain the manager of the colliery and be responsible for the management of the colliery.

20481. You think it desirable that he should feel that he is responsible ?—I do.

20482. And that nothing should relieve him from that feeling of responsibility ?—No.

20483. The men in your district think an inspection by them would tend to relieve him from responsibility. You say here in your note, "Men think their examination tends to relieve managers of a responsibility they ought not to be relieved of and places on men a responsibility they ought not to have" ?—That is their opinion.

20484. Can you see any reason why the same should not apply to an inspection by an inspector, and that the result might be to relieve the manager from his responsibility ? Yes, the tendency perhaps is that way, but the whole of the responsibility would rest with the manager.

20485. The tendency is that way. Is it desirable ?—It is desirable to provide more inspection.

20486. Is it desirable that the manager should be relieved from the feeling of responsibility ?—I do not gather that he would be relieved.

20487. Is it desirable that he should ?—No.

20488. You think that it is not conducive to safety that he should feel that he is relieved from his responsibility ?—It is not.

20489. Forget for the moment the bi-annual inspection. That might be the result of a too frequent inspection by the inspectors ?—I cannot see that it would relieve him of any responsibility.

20490. Might not the result be if the manager knew the inspector had been round and said it was all safe, that it might relieve him from the responsibility if the inspection was too frequent ?—He might feel safer in his mind, but I do not know that there would be any deduction of responsibility.

20491-2. You say that the men think if they inspect the mine it will relieve the manager from his responsibility. Why should not the manager also feel relieved from his responsibility if the inspector inspects the mines too frequently ?—I cannot say more upon that point: I simply give you the men's view of it—the way they look at it.

20493. Do you consider that it is the inspectors' duty to do more than ascertain that the Mines Act has been carried out ?—No, I do not know that his duty is more than that.

20494. If you go down a pit yourself and do not inspect anything like the whole of the pit, cannot you see from the general way the work is being done whether it has been done under good management or under slovenly management ?—It depends upon how much of the pit I examine.

20495. Examine as much as you like; just a small portion of it: cannot you say from what you see by examination of a small portion whether the management is good or bad ?—I am not prepared to admit that examining a small portion of a pit justifies you in saying that the rest of the pit is like that.

20496. I am taking first of all the general aspect of the pit as it comes along. If you go round a section and find that all is in very good order, does that not give you some indication as to what the condition of the whole pit may be ?—It may give some; undoubtedly it does do.

20497. Supposing an inspector goes down a certain distance and there is every evidence of the management being satisfactory, does that not give a good indication as to the whole of the mine ?—I do not dispute that for the moment: but my point is this, that we need more than indications; we ought to have more than indications.

20498. You think, although it gives what you call a *prima facie* case in favour of good management, that is not conclusive ?—No.

20499. And you think by inspection twice a year you would get that ?—Yes.

20500-1. Although you agree that the conditions of the collieries are changing day by day ?—There must be changes, of course. I do not know that I said "day by day."

20502. I understand that you suggest that there should be a third grade of inspectors ?—No, I did not make the suggestion: it was put to me by the Chairman, and I said that I saw no reason why that should not be done.

20503. Do you think those inspectors of a third grade should be less qualified than the other inspectors ?—I do not think that there is any necessity for submitting them to the same severe examination that a principal inspector has to pass.

20504. In what particular matter do you consider they might be less qualified ?—I should think, if they understand ventilation and gases, and that kind of thing, that they would be qualified for this particular work of inspecting the mine.

20505. What other qualification do you suggest for a chief inspector beyond understanding ventilation and gases ?—I do not know. I do not know all that is expected of a principal inspector.

20506. If a man understood that, he would be pretty competent to manage a colliery ?—He would know something.

20507. I want to see what difference you would make in the qualification of the third grade and the first and second grades.—I cannot say what differences should be made, but I am not prepared to say that those third-grade men should have to pass the same examination as the first-class inspectors have to pass.

20508. I want to know why not ?—They would not occupy the same position.

20509. They must, I suppose, be able to measure ventilation, read plans and understand gases ?—Yes.

20510. Do you see any advantage in having a man less qualified than a chief inspector ?—If you can have chief inspectors all the way round I have no objection to it, but I do not see how you can.

20511. Your assistant inspectors would become chief inspectors in time. Do you see any object in having a less qualified man ?—I think you should have the best qualified man for the particular work.

20512. What is he to do ?—To inspect the mines.

20513. To inspect the mines he must understand ventilation and gases, how to measure the ventilation, and read the plans. He must understand all that ?—It has not been made clear to me that this man should necessarily have the same qualification as the chief inspector, but if it is necessary for him to have that——

20514. I want to know what you expect to get from this man less qualified other than you do from a better qualified man. Is he to do exactly the same work as the chief inspector or the assistant inspector ?—He would have to inspect the mine.

20515. Inspection is the great point we are aiming at. Is he to be supposed to make an inspection of the mine to the same extent as the chief inspector would be able to do ?—I think so.

20516. Why should he not then be equally qualified: why should he be less qualified ?—I have no objection to his being equally qualified.

20517. Do you see any advantage in his not being equally qualified ?—He should be qualified for his work, but I am not prepared to say that he should have the same qualification as the chief inspector.

20518. I want to know why he should not have it.—Because I am not clear that it is necessary.

20519. Is it necessary that a chief inspector should be qualified in that way as he is now ?—It is necessary for him to be qualified for his work.

20520. I do not understand: the object of all the inspectors is inspection, to see that the Act is carried out ?—Yes.

20521. I cannot understand why you think one grade should be less qualified than another ?—I do not say that they should be. I simply say that it is not made clear to me that he should have the same qualifications as the chief inspector.

20522. Can you make it clear to me why he should not ? That is where my difficulty is. He has to do the same work: why should he not be equally qualified, and be able to advance to the post of chief inspector when opportunity offered ?—I do not know that he would have to do the same work all round as the chief inspector.

20523. Can you suggest what he would not have to do in the way of inspection ?—Not in the way of inspection.

20524. For the purpose of inspection he ought to be qualified as well as the chief inspector ?—Just for the purpose of inspection.

20525. The purposes of inspection include everything so far as safety is concerned, do they not ?—That may be.

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20526. You can give no reason why he should be less qualified?—Except the inspector may have other duties—that is, the principal inspector.

20527. You can give no reason incident to safety why he should be less qualified?—No.

20528. Then, with reference to inspection under General Rule 4, do you think the districts of the deputies are too large sometimes for examination purposes?—I think it would be better if they were smaller in some cases.

20529. Can you make any suggestion that any rule can be made as to the size of the districts?—No, I do not know that I can, but in some cases they have a larger district to travel than they can travel within the time and examine it—in and out, that is.

20530. You cannot suggest any rule which could be formulated; that must be left to the management?—And to the circumstances.

20531. Left to the manager to decide in each case what he considers a sufficient district. The deputies you have recently heard do not examine all the stalls. What examination does that refer to?—I say they do examine the faces and lips; it is the intermediate gates.

20532. What examination does that refer to?—The morning examination.

20533. Before the men go down?—Yes.

20534. How do they know that they do not examine these?—It is a matter of common knowledge that the deputy enters at one gate and goes through the faces.

20535. This is an examination made before the men go down. How do the men know he does this? I can understand any examination during the shift they could give information about, but I do not understand how they can tell you what he does before they go down the pit?—They know what distance he can do in the time.

20536. Is it a conclusion? They do not know that he does not visit the gates?—They know he cannot travel it.

20537. Is that the reason they give you that information?—Yes.

20538. That has been in existence for a long time, I suppose. The deputies have had the same districts to travel for some time?—Yes.

20539. Can you account for no complaint having been made before by the men?—I do not know that we are complaining now particularly. I am simply stating what I believe to be a fact.

20540. You believe it to be a fact because the men think the distance is so great that he cannot do it. He has to put this chalk mark on where he inspects?—At the gate ends.

20541. Yes. They think he does not inspect, although the chalk mark is there?—He does inspect the faces and the lips and the gate-ends, but he does not inspect the travelling roads.

20542. How far away from the faces do you think he does not inspect?—He does not inspect down the intermediate gate roads.

20543. The travelling roads?—Yes.

20544. They are inspected by somebody?—Not in some cases.

20545. Does not the Act of Parliament provide that the travelling roads have to be inspected?—Yes.

20546. In your case the Act of Parliament is not carried out?—No.

20547. You do not want an alteration of the law, but an alteration in the administration of the law?—Yes.

20548. The evidence upon which you make the suggestion is not that the men have seen it, but they think the distance is so great he cannot do it?—They are sure it is.

(*Chairman.*) I understood the witness distinctly to say they had stated in so many words that this inspection was not carried into effect?

(*Mr. Ratcliffe Ellis.*) He did say so.

20549. (*Chairman.*) It seems all you have heard from the men was that the districts were so large that it was impossible that it should be done, and not that as a matter of fact it was not done?—The men say it is not being done.

(*Chairman.*) How do they know?

(*Mr. Smillie.*) Will you put the question to him—are there men working in the night time who do see the firemen?

20550. (*Mr. Ratcliffe Ellis.*) Are the men who give the information the men working in the night time?—We have it given to us by night men and day men too, that they do not travel all these gates, neither shot-firer nor deputy.

20551. Because they cannot do it, or that they have seen they do not do it?—In some cases they have seen that they do not do it.

20552. You had no complaint as to this from your men until you enquired whether it was done or not?—No.

20553. I think we have cleared up the question of fines, and you and I agree upon that that the system of having a general contract that a man must pay a fine and advertise it is objectionable?—Our men will not accept it. I do not agree with it.

20554. I agree it is objectionable. You do not see any objection if the two agree together, after the offence is committed, to a fine being paid?—That is done.

20555. I want to ask you about making Special Rules What is your objection to the present method of making Special Rules?—My only objection is that I think the workmen could be consulted with advantage.

20556. The Act of Parliament obliges an employer to propose Special Rules?—Yes.

20557. It is his duty to do it?—Yes.

20558. It empowers the Home Office to object to these Rules, and, failing agreement, it goes to arbitration?—Yes.

20559. The rules being once established, the owner can propose an amendment to a rule and submit it to the Home Office, and the same proceeding is gone through, and if they do not agree it goes to arbitration?—Yes.

20560. The Home Secretary can propose a rule, and if he and the owner do not agree, it goes to arbitration?—Yes.

20561. At what point do you say the workmen should come in?—Some 10 or 12 years ago the inspectors in our district asked the employers and the men to meet for the purpose of considering an Order that had been issued with regard to explosives, and talk the matter over. The meeting took place, and I was there, and I was convinced then, and I have been convinced ever since, that if meetings of that kind could be held when Special Rules are about to be suggested, it would be to the advantage of both sides.

20562. What is to prevent it being done now?—I do not know of anything to prevent it, but it is not done.

20563. That was done by the inspectors, and both the employers and the workmen met together, and that could be done now if it was done then?—It would be an advantage if it was done.

20564. Do you want to make that compulsory?—So long as that point is realised I do not know that it should be compulsory, although, if it is compulsory, of course it would have to be done: there would be no loophole.

20565. Do not suppose that I am objecting to these meetings. I want to see how it is going to be carried out by Act of Parliament. Supposing the owner wishes to propose a Special Rule, is he to be bound to have the assent of the men before he can propose it?—I would not say that he is bound to have the assent of the men, but I would say that the men should be consulted.

20566. With what object?—Because they are interested in the Special Rules.

20567. Suppo ing you can propose the rule without the men's consent, what is the object of debating it at that stage?—On the ground of common justice, I say the men should be consulted.

20568. You say the men should not have a right of veto. Whether the men like it or not he should be entitled to propose his rule?—If there was some fractious or captious opposition to a rule that was obviously necessary, then he should have a right to enforce it.

20569. I take it that the opposition is not captious, but that the owner says, "I do not agree with you: I am going to propose the rule." Do you think he should have a right to do so?—I think the proper thing would be to go to arbitration.

20570. At this stage, when I want to propose this rule do you say the men shall be entitled to say, "You shall not do so"? You do not go so far as that?—No, I think we could not.

20571. Would this meet your views: If the owner is left at liberty, as he is now, to propose a rule, that when it gets to the Home Office it should be advertised, and anybody interested should have a right to object to it, men, or Home Office, or inspectors; if those objections cannot be removed, then that the question should go to arbitration as to whether the rule should be established or not, and that

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persons who object should have a right to be heard ?—I see no reason why the men should not be consulted before it goes to the Home Office.

20572. If the men are not to have a right to say you should not propose that rule, why should they be consulted ?—The men would not object to anything that was reasonable.

20573. Supposing the men did object, you agree that the owner is still entitled to propose his rule ?—Provided it was obviously necessary, I say.

20574. Whether obviously necessary or not, I understood you to say that notwithstanding the men object he should go on ?—I did not say that he should have a right to propose a vexatious and oppressive rule.

20575. How do you draw the line ? Do you say that the owner shall not propose a rule that the men do not agree to ? You cannot prevent rules being proposed that are essential to safety. If you do not go to that extent, what is the use of discussion with the men before the rule is proposed ? I agree, before the rule is established, the men should have the fullest opportunity of criticising it, and their objections should be considered by the Arbitrator, if necessary ?—That is just my contention.

20576. Then you agree with me ?—But I cannot say the owner has no right to propose the rule. I say he has a right to propose any rule he thinks necessary, and the men should have an equal right to consider it before it goes to the Home Office.

20577. That is where we do not agree. I want to know why it should be so. What use would be served if the owner can send it to the Home Office, whether the men like it or not ? Is it not the proper time for the men to object when the rule is sent to the Home Office and they advertise it, and say the owners wish to establish this ? Then the men can object, and if they cannot agree they can go to arbitration ?—The men should have the opportunity of considering it before it goes to the Home Office.

20578. Supposing the owner is prohibited from proposing a rule, many rules, which are essential for safety, would not be proposed at all if he is bound to have the sanction of the men to the rules ?—I do not think that would be so.

20579. The haulage roads were referred to. You are rather looking forward to new workings where the haulage roads can be made straight and you can have separate travelling roads and other arrangements of that sort. That is your view ; you are looking to the future, rather ?—I do not know that I was.

20580. You do not think in the present collieries, the old collieries, that they would stand the expense of making separate travelling roads ?—I said, I think, that where they could they should be made.

20581. Upon the question of explosives, you do not have much shot firing in your district ?—No, comparatively speaking.

20582. Your view is that the workmen should not be entrusted with the explosives ?—That is so.

20583. That should be in the hands of the officials ?—Yes.

20584. Do you agree that the explosives should be supplied by the owner, that the men should not be entitled to buy where they like ?—Yes.

20585. You agree that the owner should supply them ?—Yes.

20586. (*Mr. Wm. Abraham.*) With regard to inspection in general, you believe in the necessity of inspection ?—Yes.

20587-8. You believe that good as been done by mines being inspected in the past ?—Yes.

20589. It is your wish that that inspection should be made more thorough and efficient ?—Yes.

20590. Is there not some difference between the inspection made by workmen on their own behalf and inspection made by the inspectors on behalf of the Government ?—Yes, there will be some difference.

20591. While it is the object of the inspectors of the Government to see that the Mines Act is carried out, is it not more the object of the inspection made by the workmen to see the immediate condition of the work ?—That is their only object, I think.

20592. In your opinion, it is that kind of inspection that is needed ?—Yes.

20593. It is for that kind of inspection that you would have this new grade ?—Yes.

20594. They do not need, to do that effectively, the same high qualification as the first-class inspector ?—That is so. That is the reason I said I saw no necessity for it.

20595. You have told us you have not had much experience with inspection made by workmen ?—No.

20596. Have you noticed that the law prevents workmen appointing examiners on their own behalf who are mining engineers ?—Yes.

20597. All this talk about having the same qualification is unnecessary ?—I think so.

20598. It is an unnecessary qualification for the men to possess to assist in the efficient inspection of mines ?—Yes, I do not see any necessity for them to have the chief inspector's qualifications for that work.

20599. Persons employed in a mine may, from time to time, appoint two of their number or any two persons not being mining engineers. You have not had any great experience in your district of this, but do you know that the reports of the inspections, made by these men, are brought forward as proof of safety of a mine after an explosion ?—Not in our district.

20600. You do not know that. Your district, as a rule is rather exceptionally free from gas ?—I do not remember an explosion resulting in loss of life.

20601. It is free from falls of roof ?—Yes, I think so, fairly.

20602. It is exceptionally free from mining accidents altogether?—Would you just let me qualify an answer I gave a second ago when I said I did not recollect an explosion from gas causing loss of life. I do recollect one.

20603. In your lifetime ?—Yes, it is only a year or two ago. It was a deputy.

20604. Is it the practice in your district not to fill the trams over the brim ?—They do not fill them over-hanging the brim, but they are filled considerably higher than the empty tram. The coal is heaped up on the tram.

20605. How high ?—It will vary. Where they have these thick seams and thick dirt coming on the top, they put as much on the tram as they can. Their average weight will be 14 cwt., or 15 cwt.

20606. We saw the trams filled in that way ?—Level full ?

20607-8. About level full ?—In other cases they will be a foot or 18 inches above the side of the empty tram : I mean, the coal will.

20609. Is this colliery we saw in Nottingham exceptional for Nottingham itself ?—No, I cannot say that it is. You are speaking of Cinder Hill.

20610. You cannot say it is not exceptional ?—Not exceptional.

20611. With regard to the question of fines, what is your own opinion with respect to them : I mean as between fining a man and taking him before the magistrate. Does it affect the discipline of the mine?—I am not quite sure that I can answer the question in a very few words. My own opinion is this, that all things considered the system we have in Nottingham is a system which I do not see can be improved. The only complaint that is made at times is that the fine, in the case of a man, is somewhat excessive. There are cases here and there where the man refuses to pay the fine, and perhaps the owner will discharge him.

20612. With regard to this point that men do not exercise their right to examine the collieries, is it or is it not the fact that that kind of interference is so unpopular that you cannot get the best of your men to do it ?—They will not do it. They will not examine.

20613. (*Chairman.*) The best men will not. You cannot get any men, good, bad or indifferent, to examine ?—Generally speaking the men will not do this.

20614. You do not mean to say the good men are especially shy of conducting these experiments ?—No.

20615. You have no more difficulty in getting good men than bad men ?—There is a general reluctance to do it.

20616. (*Mr. Wm. Abraham.*) I will put it again : do you not find a greater reluctance on the part of men who have passed their certificates and who are considered to be the more intelligent of our class to do this kind of thing ?—I think there is.

20617. (*Chairman.*) The good men are more reluctant to undertake this work than the indifferent men ?—Generally speaking they are looking forward to a higher position, to becoming managers themselves.

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20618. They might jeopardise that by something they would report?—Yes.

(*Mr. Ratcliffe Ellis.*) He has never had an instance where that has been realised.

(*Mr. Wm. Abraham.*) That may be so, but there it is. I am only bringing out the fact: that is all.

20619. (*Mr. F. L. Davis.*) Do the men in your district take the responsibility of reporting dangerous conduct, or breach of the rules on the part of their fellow-men to the managers?—To the officials.

20620. To the officials?—The officials report.

20621. My question is, do the men. Where cases come within the knowledge of the workmen of a man breaking a rule, putting his fellow-men in danger, would they then take the responsibility of reporting that?—Yes, I think the men would report it.

20622. I am afraid the responsibility is exaggerated very often, and they do not. There are more of them who are interested in the safety of the mine just as managers are?—Yes, I think they realise that.

20623. I did not understand what you meant by saying that the workmen's inspection report would tell against them. I can understand it telling in favour of the manager by producing that report and saying "Here is the mine inspected by the men themselves within the last week, and they said everything was satisfactory": but how can it tell against the men?—I think I put it that an unfavourable report might tell against the men: that is as a co-worker.

20624. That I understood, but I think the way in which you put it was rather different. I can understand the inspection telling in favour of the manager, and I do not see any reason why it should not be used. Supposing an accident did happen and he produced a report from the men that a few days ago, a week, or whatever it was, as far as they could see everything was satisfactory?—That is the other point.

20625. A favourable report?—Yes, that is where an accident has occurred perhaps a month after an inspection has been made. What I meant was this: when the men inspected the mine, say a month prior to the accident, so far as they knew the mine was in a satisfactory condition, but their lack of technical knowledge is such that their report might not be worth a great deal, I think I put it in that way, in addition to which the conditions of the mine may have changed considerably during the month.

20626. I do not know that I should quite take that view. We all know, as we hear to-day from you, and we all agree, that the conditions of the mine change day by day. It is quite possible a report given a month before might not have much effect upon what would happen yesterday?—That was my point.

20627. Do you yourself, as representing the men, or any of your fellows, make a point of informing the inspectors when you hear that there is anything wrong at the mines, that the men think is wrong, the rules being broken, or the mine being in a dangerous condition; do you inform the inspector of that?—I have not informed the inspectors yet. I have never communicated with an inspector at all upon matters of that kind. If any breaking of a rule was brought to my notice I should communicate with the manager himself at once. We have a good class of manager in Nottingham, and we are on very good terms all round.

20628. That is very satisfactory indeed?—I should not go to the inspector.

20629. I think that is done very largely in our district in Wales, but in some cases possibly where the miners' agent is not on such good terms with the manager he would inform the inspector. I am not complaining. The inspectors have told us in their evidence that they get a number of communications from men suggesting that they should go to such and such a colliery?—Yes, I know.

20630. In your district you have had no occasion to do that. You go straight to the manager if you have anything to complain about?—Yes; we can approach every manager and go into all colliery offices.

20631. (*Mr. Enoch Edwards.*) Your experience is of Nottingham and Nottingham only?—And a little of Derbyshire. I am a Derbyshire man by birth.

20632. Your district is not considered to be dangerous from either dust or gas?—No.

20633. That may be one of the reasons why the workmen have not had such frequent inspections of some districts?—It may be.

20634. At no time in your colliery has there been any fear that the place is going to be blown up by gas?—No.

20635. So that there was really no very strong ground for appointing workmen to make these examinations?—No.

20636. Then you say you think that there should be more inspectors, you refer to what has been accepted as some sort of other class of inspectors. You have in your mind a person to inspect the mine?—Yes.

20637. Frequently?—Yes.

20638. Mr. Ellis was very anxious to get to know from you why there should be a difference between these particular inspectors and the chief inspectors?—Yes.

20639. Of course we have now in managing pits degrees of management: we have orders from a manager, an under-manager, an over-man, and a fireman?—Yes.

20640. The fireman is the man who does the examination?—Yes.

20641. Is that the type of inspector you mean who shall examine?—That is nearer the type than the principal inspectors.

20642. That is to say, a principal inspector must have a complete knowledge of electricity? It would not be necessary for the man you have in your mind to possess all these degrees in these higher technical subjects?—That is what I mean.

20643. You want a kind of inspection that is made in the mines now as part of the rules by the Manager, the under-manager, the overman and the fireman. They all take part in the management of the mine?—Yes.

20644. The chief of it is done by the fireman?—Yes.

20645. So far as it deals with ventilation and gas, and so on?—Yes.

20646. Mr. Ellis was rather anxious to get you to admit that there may be what is called too frequent inspection?—Yes.

20647. I think you said that the mines should be inspected twice a year?—Yes.

20648. Every mine?—Yes.

20649. And when you say every mine you mean every seam in a pit?—Yes.

20650. You would not think that too much inspection—twice a year?—No.

20651. Of course the inspection by an inspector is hardly the inspection of a workman, after all?—No.

20652. The workman is supposed to make a report; I do not know whether you have seen the form they have at collieries?—Yes.

20653. He reports, and that report is kept in the colliery office?—Yes.

20654. You are not aware whether the inspector reports at all?—I am not aware that he does.

20655. He does not leave a report behind him?—I am not aware that he does.

20656. On his visits he may give orders to carry out the Act under which he is appointed, and to see that it is carried out. He would give such orders?—Yes, and I have heard managers say before leaving that he has told them he was satisfied with the mine so far as he had seen it.

20657. You think twice a year to examine these mines would not be too frequent inspection?—I do.

20658. Have you any knowledge of how far the inspections now in Nottingham extend through the colliery and the seams of the various pits? Does the inspector visit all the colliery when he visits?—The whole of the colliery.

20659. Yes?—No.

20660. If he is inspecting for a sample he may take at the instance of the management the best sample?—Yes.

20661. They usually know when he is coming?—Yes.

20662. At least it is common talk among the workmen, at any rate?—Yes.

20663. So that it is possible, unless he examines the whole of the colliery, that he sees as a sample a particular seam, which may commend itself to him as safe, while the other parts of the pit which he does not see may not be so secure or certain?—That is so.

20664. As to the question of fines, I understood that what you objected to was a sort of schedule of fines?—That is so.

20665. As if it were a table of articles for sale?—Generally speaking they object to it, but at half-a-dozen collieries they have a schedule.

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20666. They object to a schedule of fines being put up as if you were keeping an establishment for the sale of articles ?—Yes.

20667. In the judgment of the men they could arrange the discipline beforehand by a sort of easy method of 3d. or 6d. for this or that ?—They have this schedule, and I have no reason to think that discipline is better maintained than where they have no schedules.

20668. From what you know of it the men object to it. It does not affect the safety of the mine ?—I do not think it does.

20669. In the case of fines, who generally lays the information ? If a man has committed a breach of a rule, who generally lays the information ?—The deputy, or some other official.

20670. They would not be cognisant of the breach unless reported to them by somebody else ?—Supposing props are too far apart.

20671. I am talking generally. If the deputy goes in a place and sees the props that should be set every 4 ft. 6ins., according to arrangement, are set every 6 ft., he has a clear knowledge of the breach of the rule himself ?—Yes.

20672. The fireman largely would be the man who would be in contact with these men; they are more under the eye of the fireman than under the eye of the manager ?—I say the deputy, generally speaking, would be the person to lodge the complaint. "Deputy" and "fireman" are used in our county, but they are the same. In one case it is the deputy, and in another case the fireman.

20673. (*Chairman.*) They perform precisely the same functions ?—Yes.

20674. (*Mr. Enoch Edwards.*) A fine would be posted up by the management where the case is not taken before the Court ?—On the bank.

20675. In the colliery office ?—I cannot say that is done.

20676. In the absence of a schedule the fines are inflicted at the colliery office. Do they consult the man as to how much the fine should be ? Who fixes the fine ?—The manager says in his opinion that the man should be fined, and of course the man is told that. If he thinks the fine is unreasonable he says at once he thinks it is unreasonable, and I have known the fine to be reduced by the man protesting against it.

20677. I have not got there yet. I want to know who is responsible for fixing this fine. Is your Union, or organisation, or the checkweighman of the man, or anybody else consulted at all about it ?—The manager always suggests the fine except where they have a schedule.

20678. He would not delegate that to a deputy ?—No.

20679. The fireman would not fix the fine ?—No.

20680. Nor the under-manager ?—The under-manager might.

20681. Usually the manager would fix it ?—Usually the manager.

20682. The certificated responsible manager of the pit would fix the fine ?—Yes.

20683. The man is expected to pay it ?—Yes.

20684. The other alternative, I suppose, is to take his tools ?—Yes.

20685. He can always do that ?—Yes.

20686. I understood you to suggest if a man had a good place and was doing pretty well, whatever the fine was, even if it was rather stiff, he would rather pay it than lose his place ?—Yes.

20687. If the man is told by the manager that the fine for a certain offence will be 10s., they stop it off him if necessary ?—Yes.

20688. He does not take it to the office ?—He consents to it being stopped.

20689. He does not take it to the office ?—No.

20690. He does not pay for it ?—In some cases it is paid, and in others it is deducted, but he signs a written declaration to the effect that he is willing for it to be deducted.

20691. They collect these fines in the office ?—In some cases. In some cases they pay the fine before they draw the money on the Friday night. Supposing the offence is committed on the Wednesday, the man would pay the fine before he drew his money.

20692. (*Mr. Ratcliffe Ellis.*) Have you ever known cases in which it is put over two or three weeks ?—Yes.

20693. (*Mr. Enoch Edwards.*) I understood Mr. Ellis, in quoting the Truck Act, said where the fine was excessive that he could go to Court and get it back ?—Yes.

20694. You say you have known them, where the fine has been too heavy, give it to them back. You have known them return it ?—I have known them reduce it.

20695. You have known them reduce it where there is an agreement ?—Not where there is a schedule of fines.

20696. The colliery manager in his office fixes this fine ?—Yes.

20697. He does fix it at too much sometimes ?—Yes. Well, at any rate he has fixed it and it has been reduced; the man has objected to it afterwards, and it has been further considered, or re-considered, and the manager has reduced it.

20698. Does he not object at the time ?—He objects when he is told what the fine that is proposed is.

20699. Is general discipline maintained by the management in any of the Nottingham collieries without resorting to fines ?—I cannot say that there are any collieries where fines are not, at times, inflicted.

20700-1. Do many take the men to Court ?—We have not many prosecutions; I could not say how many, but I do not think that there are many, comparatively speaking.

20702. You are clearly of opinion with regard to the new Special Rules for a colliery, before a rule is sent up to the Home Office that it should be submitted to the men ?—Yes.

20703. You think by that means you would be able to establish rules which would work more smoothly ?—I do.

20704. You have no doubt in your mind that it would interfere with the safety ?—I do not think it would. I have no reason, whatever, to think that.

20705. Do you think men, generally, would realise that a rule, although many of the rules have a considerable bearing upon their wages and contracts, has a bearing on the question of safety ? Do you think the men are very keen with regard to the question of safety ?—They would not object to any reasonable and fair rule.

20706. It has been suggested that there was that possible advantage that it might not be possible to get rules which would throw some onus on the workmen and which would be desirable in their interests if the men were consulted ?

(*Mr. Ratcliffe Ellis.*) Not possible to get beyond the first stage.

20707. (*Mr. Enoch Edwards.*) You think it would not hinder it by consulting the men ?—I am well convinced, in my own mind, that we should never have the trouble that Mr. Ellis apparently anticipated.

20708. (*Mr. Ratcliffe Ellis.*) In Nottingham ?—I do not think we should anywhere in the country.

20709. (*Mr. Enoch Edwards.*) Your men feel that before the rules are sanctioned by the Home Office or anybody else, they should be consulted in regard to them ?—We have been consulted by colliery companies, here and there, when they have wanted an alteration in the Special Rules, and it has worked well, and it is that experience which makes me think it would be admirable if generally done.

20710. (*Chairman.*) What I understood you wanted was not that the rule should be submitted to the men before being sanctioned by the Home Office, but submitted before they were even sent up to the Home Office ?—Yes.

20711. That the mine owners should not have committed themselves in any way to the sanctioning of any rules before the men had been consulted ?—That is so.

(*Mr. Ratcliffe Ellis.*) That they should not be allowed to propose them ?

20712. (*Chairman.*) Yes, should not be allowed to propose them to the Home Office until the men have been consulted, although, if the negotiations between the men and the masters broke down, the masters would be at liberty to produce these rules to the Home Office as their rules. What you say is before the masters have committed themselves to these rules to the extent of submitting them to the Home Office, that the men should have some voice in the matter ?—Yes, that is it, exactly.

20713. (*Mr. Smillie.*) In speaking with regard to fines, I take it you speak for Nottingham only ?—That is so.

20714. Upon all the other questions do you speak for Nottingham or on behalf of the Miners' Federation, which is wider ?—Well, I was appointed by the Federation.

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Mr. J. G. Hancock.

30 May, 1907.

20715. You confine your evidence largely to your own county?—I can speak more confidently of my own county.

20716. May I take it that you have Special Rules applicable to your county, and that the majority of them are dealing with the safety of the workmen?—Yes.

20717. May I take it from you that the workmen have as much at stake in the mines of this country as the employer?—I think so.

20718. Upon that ground you are of opinion that they have an equal right to a voice in the establishment of Special Rules which are supposed to be for the safety of life and limb underground?—Yes.

20719. They have not generally, up to the present time, been taken into consideration in the establishment of Rules?—No.

20720. In the initial establishment of rules?—No, they have not.

20721. If it were agreed that the employers were entitled to initiate, in the first place, Special Rules which are supposed to be for the safety of the workmen, without the workmen having any voice in them, would not the workmen be as well entitled to initiate and send to the Home Office Special Rules they wish to have established?—Morally speaking, I think they would.

20722. The better way, you think, would be that they should be jointly, as far as they could agree, drawn up and sent to the Home Office?—I do.

20723. I think it is admitted that the timbering rules, initiated by the Home Office in the hope of improving the safety of life and limb underground, have not met with the success which was expected. That, I think, is the general opinion?—Yes.

20724. So far as accidents are concerned. Do you know whether that is so from your own experience; has there been any change?—I do not know that it is so from my own experience.

20725. Is it your opinion that any rule of such a nature would be more likely to be observed by the workmen if the workmen by their representatives were consulted in their establishment?—I think it would have a value then that it cannot possibly have if the workmen have not been consulted.

20726. Now, with regard to fines, one point has not been made clear to me. Do you know whether or not the workmen in other counties outside your own county are satisfied that there should be fines established in the collieries?—I cannot say.

20727. You do not know?—I do not know.

20728. Could you give us any idea of the seriousness of the breach of discipline or breach of a Special Rule which would be satisfied and met by a fine? Would you say a case of taking matches into a mine where naked lights were prohibited would be met by a fine?—I am not prepared to say it is.

20729. Or the opening of a safety lamp?—No.

20730. That would be too serious a matter to deal with by a fine?—I think so.

20731. Or any other breach of the Mines Act or Special Rules which seriously endangers the lives of the people generally underground?—I think there should be prosecutions.

20732. In a case of that kind?—Yes.

20733. No provision was made in the Mines Act for local fining by the employer for any breach of a Special Rule or of the Mines Act?—No, I think not.

20734. Was it not the intention of the Act that all breaches of rules should be punished by prosecution?—I cannot say that it is.

20735. There is no provision for any other kind of punishment?—No.

20736. If you are satisfied that a mere technical breach of a Special Rule or of the Mines Act should be dealt with by a fine mutually agreed upon, would you say the same thing with regard to a breach of the Mines Act by a certificated manager, that the mines inspector and he shall enter into an arrangement of fines rather than go into court?—I could not say that. That is a point that has never suggested itself to me.

20737. Would not the one be quite as just as the other? If it satisfies in the case of a miner would it not be quite as satisfactory in the case of a mine manager and a mines inspector?

(*Mr. Ratcliffe Ellis.*) A good deal more satisfactory to him than being brought before the magistrate.

20738-9. (*Mr. Smillie.*) I want to know whether you are prepared to admit such a dangerous thing as the inspectors dealing with the manager in that way?—I am not prepared to admit that. I can hardly put the manager in the position of the worker. I cannot understand a manager doing a thing that would, comparatively speaking, be of such small seriousness.

20740. Supposing you could imagine the inspector being entitled to fine a mine manager £1 rather than take him to court, do you think that would be as effective in securing the carrying out of the Mines Act as a prosecution would be?—I do not think it would be so effective. Prosecutions are more effective than fines in every case.

20741. In the case of managers and in the case of workmen too?—Yes.

20742. If you admit that it is more effective, why set up any other system which is less effective?—I cannot for the moment say that a man should be pulled before a bench of magistrates if he has improperly filled a tram. He may never have been into a court before in his life, and I will not say that man should be prosecuted if a fine of 2s. 6d would meet the case.

20743. That is hardly a breach of a Special Rule, or of the Mines Act?—The line should be drawn somewhere, I think.

20744. It is a very important question as to the extent of a fireman's duties. Do you agree that a fireman is the most important person, so far as the safety of the mine is concerned, who is engaged in the mines of this country?—A fireman may have 50 men under his control and their safety is continuously in his hands. He is one of the most important persons?—He is one of the important persons.

20745. You would not admit that he is the most important so far as safety is concerned?—I am not prepared to say he is not: I would not say he is.

20746. At least he is of sufficient importance to justify us in endeavouring to have the best possible men that can be got to occupy positions of that kind?—Yes.

20747. Is it your opinion that his attention should be directed entirely to looking after ventilation and the safety of the mine under his charge?—Yes, I do.

20748. Can he effectively carry out his duties in that respect if he is engaged on other duties such as laying and lifting of roadways or arranging for the getting out of the trams?—No, I do not think he can.

20749. That interferes very seriously with his usefulness so far as safety is concerned?—Yes.

20750. Is there any real difficulty in finding out whether or not a fireman really examines all the roadways. His statutory duties are to examine all the roadways leading to and from the working faces?—Yes.

20751. All the working faces and all the roads which may be traversed or travelled it is his duty to thoroughly examine to find out whether they are safe. Is there any real difficulty in a person going about mines knowing whether or not he does thoroughly examine all those roads?—No, the difficulty is here so far as I can see: the fireman cannot in many cases travel the allotted gates and faces in the time allowed him.

20752. In most cases is it not the fact that there are night shifts. Fairly generally there are night shifts?—I am speaking of the morning shift. I thought you were speaking of the morning shift.

20753. I am speaking of the morning examination, but very often there are men in the morning even when a fireman goes his round, is not that so?—Not generally in our district. Very often they go down at six and cease at two in the morning, in other cases they go down later and cease work at 5 or 5.30 in the morning.

20754. I want your own experience. Is it not fairly usual for firemen themselves to complain that it is impossible for them to go their rounds because of the extent of their district?—I have heard them make the admission that they could not travel the distance in the time allowed, that is to go in and out.

20755. Is it an understood fact in every mining district in a longwall working that a fireman goes right along the coal faces from one end to the other?—Yes.

20756. That is not a thorough examination?—That is not an examination according to the Act, in my opinion.

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20757. It has been admitted that falls from sides and roof, haulage accidents, are the chief source of fatal accidents in mines ?—Yes.

20758. You were asked whether or not you would agree to making it a Special Rule that there should be a chain leading from one end of the train of tubs to the other in a haulage road. You said you were not prepared to go that length so far as the full tubs were concerned, but you would so far as the men riding in trams were concerned ? —Yes.

20759. That is for the safety of the men riding in the trams ?—Yes.

20760. Has not there been a considerable number of accidents by broken couplings and runaway trams, from a train of trams going up full ?—There have been in other districts, but I am not aware of any in ours. I cannot call any to mind and I have not the inspector's reports.

20761. You have a system of haulage in your district in which there is a large train of trams drawn by mechanical haulage ?—Yes.

20762. Sometimes up a considerable gradient ?—Yes.

20763. Are you aware the chains are used at the present time in your own county from one end to the other ?—Yes, and in other cases they are not used. Generally speaking the men are not allowed to travel those roads while the road is going.

20764. There are men to attend to the travelling road ? —Yes. *M. J. G. Hancock.* 30 May 1907.

20765. Would it be any serious hardship to make it compulsory upon the employer to have a chain over the top of every train of trams ?—I do not think it would.

(*Dr. Haldane.*) Is that a chain fixed to the end wagons ?

20766. (*Mr. Smillie.*) It is fixed to the rope on each end of a continuous haulage ?—In some cases they are underneath, in others they are what we call overhead.

20767. It does not interfere with the effectiveness of the haulage road ?—No.

20768. Would you be in favour of making it compulsory to have runaway points on all single haulage heading roads ? —The switches.

20769. Yes, runaway switchers so that if a breakaway takes place it would run off instead of down ?—Yes.

20770. You do not think that would be a serious inconvenience or danger ?—No ; in some cases they have appliances fixed in the roof, and at certain points in the road there is a handle, and from this handle to this piece of timber is a wire, and if people where this handle is know that a part of the train has broken loose they pull the handle and it drops a big piece of timber in the way.

THIRTY-SECOND DAY.

Tuesday, 11th June, 1907.

At Edinburgh.

PRESENT :

Lord MONKSWELL (*Chairman*).

Sir LINDSAY WOOD, Bart.
F. L. DAVIS, Esq.
THOMAS RATCLIFFE ELLIS, Esq.
JOHN SCOTT HALDANE, Esq., F.R.S.
ROBERT SMILLIE, Esq.
S. W. HARRIS, Esq. (*Secretary*).

Mr. JOHN WEIR, called and examined.

STATEMENT OF WITNESS.

20771.—(1) In my opinion the staff of Government Inspectors is far from being adequate. There should be a sufficient number to overtake periodical inspection of every mine in the country. At present it appears that their time is mainly taken up in making inspections *after* accidents and attending enquiries. Inspections should be more directed with a view to the safety of mines and the prevention of accidents than is at present the case.

(2) *Inspection by workmen under General Rule* 38.—This rule is practically inoperative. The men do not take advantage of it, the chief cause of this being fear on the part of the men to give offence to the employers. Several of the miners' unions in Scotland encourage the men to make these inspections and pay for them out of their funds, but notwithstanding this there has been a reluctance on the part of the miners for years to take advantage of the rule.

(3) *Inspection by Officials under General Rule* 4.—This inspection is very inefficiently carried out. Many men who are appointed to make the inspection are not the most capable men for the purpose. Some indeed of the men appointed are incapable. In addition to this in many instances the area to be inspected can only be done in the most perfunctory way in the time allotted. Not only is this so, but generally it is only the working faces that are visited, the travelling roads being neglected altogether. Unless there is very apparent danger, under such a system there is little chance of notice being taken of it. *Mr. J. Weir.* 11 June 1907.

(4) *Discipline and its Enforcement.*—Discipline would be better ensured were a better class of under officials appointed under the management. I prefer prosecution to fining, as a means of its enforcement, although I believe the men themselves would seriously object.

(5) *Special Rules.*—The present system of establishing Special Rules should be amended to give the workmen's representatives an opportunity of putting forth their views in some effective manner. Special Rules, when once established in a district, should apply at once to all new mines subsequently opened.

(6) *Falls of Roof and Side.*—A systematic method of timbering should be rigidly enforced, a system to be adopted most suitable to the seam worked. In view of the failure of the recent timbering rules I would suggest that there be a reasonable body of men either for the purpose of putting up the timber, or a district allotted to each of these men where each could almost continually supervise the men on their timbering operations.

(7) *Haulage.*—Haulage accidents in my view would be greatly diminished were one side of the road sufficiently

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Mr. J. Weir.

11 June 1907

wide from the rails so as to enable the men to stand clear of the running hutches, in addition to the usual manholes. In Fife there are a great many wheel braes not only for sections of men being served taking away the output—but there are single places which use wheels and also what is known as cut chain braes. These arrangements necessarily increase the chances of haulage accidents. In many of these inclines there should be specially constructed bogies to take in prop wood, especially if it is of any length. At the foot of all wheel braes if "pointers" were provided many accidents to "hangers-on" would be prevented. There should also be a specific height for main haulage roads. In the case of incline planes which are meant to be self-acting, it ought to be made compulsory that the gradient should be so arranged, that no assistance either from top or bottom by pushing hutches, should be required, and mechanical means employed to prevent runaways as far as possible.

(8) *Shaft.*—While men are riding in the shaft, the cages should have either gates or bars. I have seen this in operation in Belgium.

(9) *Safety Lamps.*—Safety lamps should be introduced into all mines where a Government Inspector thinks there is the slightest danger of an explosion.

(10) *Investigation into Accidents.*—Under ordinary circumstances the present system of investigation in Scotland, having been recently improved, is fairly good. Where, however, a serious accident has occurred and where there may be doubt as to the searching character of the enquiry, it should be open to those interested to claim and obtain a fresh enquiry.

(11) *Ankylostomiasis.*—Something should be done with a view of enforcing great care as to the employment of foreign workmen, or men who have been employed in foreign countries, especially from countries where disease is known to exist. Improved sanitation in mines is absolutely necessary as a further precaution.

20771A. (*Mr. Smillie.*) You are Secretary of the Fife and Kinross Miners' Association?—I am.

20772. Have you had considerable experience as a working miner and an official of the miners?—That is so. I have been for nearly 27 years secretary to the Fife Miners' Association, and I was actively engaged in the mines for about 17 years prior to that.

20773. Have you taken an active interest in all mining legislation during the past 25 or 30 years?—I have.

20774. Have you attended all the principal conferences which have been held to deal with questions of that kind?—I have.

20775. I suppose you are aware that for a considerable time past there has been a desire on the part of the organised miners of the country for improved legislation?—That is so.

20776. Is there a strong feeling that the safety of underground workers is not so well looked after now as it might be?—That is the impression we have.

20777. You are aware that the proposed Coal Mines Bill has been promoted by the Miners' Federation of Great Britain?—Yes.

20778. I want you to deal with one or two of the points which the miners propose in the direction of legislation. Are you well aware of the present system of Government inspection in mines?—Yes.

20779. Are you aware that for East and West Scotland we have two chief inspectors and four assistants?—That is so.

20780. Are you of opinion that the Government inspection, as it exists to-day, is effective?—I consider it as being far from efficient.

20781. Have you any opinion as to the methods pursued at the present time? Are inspections of the mines frequently made?—They are not, so far as my knowledge goes. My understanding with reference to these inspections is that they are generally made after an accident, or upon a complaint being made to the inspector.

20782. So far as you are aware there is no system of regular inspection of the mines made monthly, half-yearly, or even annually?—I am not aware of any.

20783. Is it your opinion that there should be an increase in the staff of inspectors?—Decidedly.

20784. Have you any opinion as to the additional number which would be necessary?—Under our Bill we desire one for each 10,000 men employed in or about the mine. Personally, I think that is scarcely sufficient, and that there should be more.

20785. You think that one for each 10,000 persons employed in or about the mines in Great Britain would no be enough for an effective and efficient inspection?—I think not.

20786. Have you considered the matter, and can you say how many you think would be necessary?—I should be inclined to follow the lines of the French system. They have an inspector for every 2,000 persons employed, which I think is not over-much.

20787. As to the method of appointing, do you approve the French system which, I understand, gives the workmen in the locality the right to appoint?—I quite approve of it.

20788. And of course that they should be paid, as the present inspectors are paid, by the Government?—Yes.

20789. Have you any suggestion to make as to the qualifications necessary for assistant inspectors proposed by the Miners' Federation?—We consider that additional inspectors appointed should be drawn from practical men who hold certificates of competency either of the first or second class.

20790. (*Mr. Ratcliffe Ellis.*) Do you think second class would be sufficient?—Either first or second class. We have many men working at the coal face just now who hold first-class certificates, and they would be, I think, quite competent to take up duties of that kind.

20791. (*Mr. Smillie.*) You would not object to its being limited to persons holding first-class certificates?—I would not object at all.

20792. But you are strongly of opinion that they should be persons who hold certificates which would show that they had a considerable amount of practical experience?—Yes, a good deal of practical experience, say, at least five years' experience, or more.

20793. Are you of opinion that persons who have had that experience are more likely to make efficient inspections than the present class of inspectors?—I think they are. They are more accustomed to that kind of work; that is to say, they are more accustomed to the mining work, and I think they would take more readily to it.

20794. I believe you have no complaint to make of our present inspectors other than it is physically impossible for them to make the inspection which you desire?—I have no complaint to make of them at all; but from our experience we know that it is practically impossible for them to make the inspections such as we should like to see.

20795. Are you of opinion that our present system of mines inspection, limited though it is, tends to the safety of the miners?—It is bound to have a tendency in that direction. If you were to withdraw the inspection it would make a great difference, in my opinion, because it would increase the laxity of the managers a great deal.

20796. The expectation which now exists of a surprise visit on the part of inspectors tends to make managers more careful than they otherwise would be?—That is so.

20797. We may take it there are a few managers whose chief desire is to obtain large outputs, and they are less careful with the lives of the men than they otherwise might be?—My view is that the main object to the manager is to produce a large output, no matter how it is obtained.

20798. And sometimes even the Mines Act is to some extent neglected in order to secure that?—I would not like to go that far, but we have a suspicion in that direction that it is not so carefully observed in order to secure the end they have in view.

20799. Would you propose that the additional inspectors if appointed should be responsible to the chief inspector?—Certainly; you must have someone to control them.

20800. Would you propose to confine them to a particular district, or to place them, as they are now, under the inspector to be sent to any district he might care to send them to?—I think it might be well that he chief inspector should have the control of these additional inspectors, have power to send them where he thinks they will be most useful, and not limit them to any particular area.

20801. You are well aware that under Rule 38 the miners have at present the right to appoint two of their number who are practical miners to make inspections once a month?—I am aware of that rule.

20802. Is it taken advantage of at the present time?—It is not taken advantage of at all scarcely in our district. The last inspection that was made in my district was in July, 1899, I think, and for several years before that there were no inspections made.

20803. May we take it from that circumstance there is no

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occasion for inspection in our district ?—There is a good deal of occasion for it in my view ; but the reason why the men do not take advantage of that rule is that they are afraid of giving offence to the employers, and when the inspections were made there was very seldom any defect disclosed through these inspections which caused the men who appointed the inspectors to get the notion that it was useless to continue it because there were no practical results in their view. I think that is an additional reason why the inspections are not taken advantage of. I consider that men appointed for that purpose should be entirely outside the influence of any employer and free to give an unbiassed and fair opinion as to how they find the condition of the mine. We have always contended that we should have the privilege that we fought for in 1887 when the Act was passed, and that the clause should contain the words, "Miners who are, or have been, employed in the mine should be eligible for making the inspections." The words "have been" were struck out in the House of Lords that year, and we have been left practically in the same position as we were prior to the passing of that Act, on this particular point, only with this advantage that we could select our men from different collieries to go and inspect others.

20804. (*Chairman.*) You can do so now ?—Yes.

20805. (*Mr. Smillie.*) But they must be working miners at the time of their selection ?—They must be working miners at the time of their appointment.

20806 You are of opinion that this Rule will not be taken advantage of, or, if it is taken advantage of, the inspection will not be so effective as it might be, unless you have the power to appoint persons who are not in fear of the influence of the employer ?—That is my view.

20807. It would be taken advantage of more frequently if that were so ?—I am certain it would. We proposed in our district that we should have the power to appoint men who should go over the whole of our county, but we discovered that that would not conform with the rule, because it was held that after they were engaged to make an inspection at one of our collieries they would not be eligible to make an inspection at another, as, being engaged in making an inspection at the colliery, they would not be then practical working miners and eligible to go down and inspect another colliery.

20808-9. (*Chairman.*) You mean that the mere fact that a working miner had been down another mine for purposes of inspection would take him out of the category of a working miner ?—That is what we understood.

20810. Your recollection is that the clause was as you wanted it to be in the House of Commons, but those words "have been" were struck out in the House of Lords ?—That is my recollection.

20811. (*Mr. Smillie.*) You understand that the reason for the words "not being mining engineers" being put in by the employers was to prevent persons who might be interested seeing their mines ? Have you any objection to the words "not being mining engineers" ?—I have no objection to that.

20812. You would be satisfied if this clause read : "who are or have been" ?—Yes.

20813. That would give you an opportunity which you do not now possess of appointing from the workmen and paying men to make a periodical examination in the district ?—Yes.

20814. There is no difficulty in your district, or Scotland generally, about payment for this work ?—None whatever. We have for many years had a standing order in our Union that if a district applies to the General Secretary for an inspection of that kind to be made, the Union pays all the expenses connected with the inspection ; but notwithstanding there is no difficulty about the payment, the men seem not to take advantage of it.

20815. Is it, so far as you know, a fact that it is because of the hard work it involves that the men have been prevented from undertaking it ?—I have never heard that stated myself.

20816. Do you think that any person has refused to make an inspection on that ground ?—It might be possible for someone to have done so, because if you take a man away from his work he may think it will be harder for him to return to his work in consequence of what may have occurred while he is away, but it is not harder work than working at the face.

20817. You think that the appointment of two men would prevent that ?—That is so.

20818. Now come to the question of the appointment of firemen to make an inspection in the morning. Are you satisfied with the present position of matters as to the appointment of firemen, and their qualifications generally ?—I am not.

20819. Do you think it necessary there should be some examination and certificate of competency for men holding that position ?—I think there should be, because I consider the fireman one of the most important officials in a colliery.

20820. And that applies especially where there are dangers arising from accumulations of gas ?—Undoubtedly,

20821. The fireman cannot possibly efficiently look after the safety of the mine under his charge unless he is a thoroughly practical miner ?—That is my opinion. He ought to be a thoroughly practical man, and there ought to be some examination, so that we should have confidence in him.

20822. And if he was a practical miner it would be all the better if he had some theoretical knowledge of gases and ventilation ?—Undoubtedly.

20823. So that you are favourable to certificates of competency being granted to firemen ?—I am, and that has grown on me recently from what has come to my knowledge. In recent fatal accident inquiries, upon the examination of firemen, they have confessed in the witness-box that they did not even know the rules—one of them, at least, did not know the rules—applicable to their duties. and they had not read them. Another one whom I examined myself confessed to tapping a stone with his knuckles instead of using a hammer or a pick in order to discover whether or not the stone which caused the accident was loose. That, I think, is rather an extraordinary condition of things to exist, and ought to be prevented by some method of examination to ascertain whether the men are competent or not.

20824. At the present time it depends entirely on the managers, who are supposed under the Act to appoint competent persons ?—Yes.

20825. A manager may appoint some person who is admittedly not competent, merely through favour ?—That is so. Of course I cannot speak to any particular case further than what I have known myself and what I have spoken of here, but men have evidently been appointed not because they were competent, but from some other cause. We have it frequently reported from the collieries that men are appointed with very little experience, and men coming from other trades have, after the lapse of a short time, been appointed to that important position. Further, we have these men at several collieries, not all, and I do not think the majority, paid less wages than the working miner, which, as you will observe, cannot attract men with practical knowledge.

20826. One of the Scotch inspectors, I think, complained of the remuneration paid to those men, and said the wages paid to them did not attract the best class of men. You agree that at some collieries in your county that is so ?—We have them paid as low as 5s. 3½d., 5s. 4d., 6s., and 6s. 4d., whereas a competent miner just now can make 6s. 6d. or 6s. 9d. easily.

20827. You think a competent miner is not likely to take the important position of fireman at a reduced rate of payment ?—Certainly not, plus the responsibility to the fireman.

20828. That may have something to do with the appointment of men in some cases who are not as highly qualified as they might be ?—Certainly. I believe that some of the men appointed do not understand the responsibilities attached to the position.

20829. Have you any personal knowledge of the extent of the district which the firemen in your district are supposed to examine ?—I have no personal knowledge, but when I was working in a mine about 30 years ago it was quite the common practice that a pretty long stretch of longwall was allotted to one man, and he went down perhaps an hour and a half or two hours before the shift began, and the firemen themselves confessed that they did nothing else but went round the faces, made a cursory examination, put a chalk mark on each face, and that constituted the inspection ; and according to the information I can obtain now from any of the representative men at the collieries, I gather that is practically what is in existence to-day. The men do not go out and in the roads as is required by the rule.

20830. (*Dr. Haldane.*) They simply go along the face, without examining each road ?—Yes.

20831. (*Mr. Smillie.*) You are aware that they are supposed to examine every roadway which the men are likely or expected to travel ?—That is the law.

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20832. It is your opinion that that law is not carried out, and that it is physically impossible for the firemen to do it at the present time?—That is my impression.

20833. Because of the extent of the district?—Because they cannot do it; and I do not think the management insists on their doing it.

20834. (*Chairman.*) Is there any system by which you can tell whether a man has examined a road or not? Is he ever obliged to put a chalk mark at the end to show he has been down that particular road?—There is no particular method by which you can detect it that I am aware of—he only chalks the face.

20835. Suppose it was obligatory upon him to chalk some other part of the roadway to show he had been down there?—That would be an additional method of detecting whether he had been there or not.

20836. But at the present time there are absolutely no means of finding out whether a man has been down a roadway or not?—There are no means of detecting it in the way you indicate.

20837. (*Mr. Smillie.*) If it were compulsory that he should put the day of the month on each face midway between the head of the face and the roadway, that would make it necessary he should visit each roadway in order to do so?—If he was bound to put a chalk mark at the beginning of the road where he should enter, and again in the centre and at the end, that would enable you to detect it; but if he has only to put a chalk mark at the entrance, then he can put it there and pass on to another, and so pass round the faces.

20838. The chief point is that, so far as your own personal knowledge goes, and what you have heard from your own people, the districts are so large that it is impossible to do that at the present time?—The reports we get indicate that clearly.

20839. (*Chairman.*) I understand you to say on the first inspection he has not time to do it?—Just so.

20840. I understand on the second inspection the fireman might have time to do it?—Yes; he is not then limited to two hours.

20841. (*Mr. Smillie.*) He is limited on his first inspection to two hours?—Yes.

20842. (*Chairman.*) On his second inspection he may take as long as he likes about it, and if he chooses on the second inspection he can go down the roads?—That is so.

20843. You think as a general rule he does not?—As a general rule I think he does not. That is my impression, but I have no proof of it, however.

20844. (*Mr. Smillie.*) If the whole of the time of the fireman was devoted to the examination of the working faces and the ventilation, there would be time for making a thorough examination on the second inspection?—Undoubtedly.

20845. Is the whole time of your firemen in Fife, and Scotland generally so far as you know, devoted to looking after the ventilation and the roof of the pit and the working faces?—No. I have myself heard the firemen state that they have other duties to perform, such as clearing roads and putting up timber where repairs were needed.

20846. And sometimes they have to do with getting the output?—Regulating the trams and keeping the drawers going properly, the pony drivers, and so on, and seeing the work goes on regularly. That is part of the duty so far as my impression goes.

20847. Is it the opinion of the miners that the firemen's duties should be confined to looking after the safety of the working, the ventilation, the roof and sides, and so on?—That is so, and I think that should be so.

20848. Do you think that if that were made general in the country there would be fewer accidents than there are at the present time?—If that were rightly enforced I think it would have the tendency to decrease accidents.

20849. Let me ask you about the timbering. You are aware of course that a very large proportion of the accidents arise from falls of roof and sides. Are you satisfied with the present system of timbering?—I am not satisfied. I think there could be an improvement. When the systematic timbering was enforced, by the recently adopted Rules, I expected that there would be an improvement as to accidents from roof falls, but unfortunately that has not been so. However, I have not lost faith in it. My view is that there should be a special class of men either set aside for the purpose of doing timbering, or seeing that it is thoroughly done, each man should have a certain district allotted to him to supervise, and that district should not be too large.

20850. Either to put up the timbering or to see that the men working at the face put it up in a position which gave the greatest safety?—That is so.

20851. You are aware I suppose that a considerable amount of carelessness exists at the present time amongst certain classes of the workmen at the face?—Undoubtedly a good deal of carelessness and a good deal of incompetency.

20852. The two things, incompetency and carelessness?—Yes.

20853. And to some extent that arises from the fact that the men are paid by piecework, and sometimes take risks that they would not otherwise take?—I am sure of that. Occasionally a man will, in order to get a certain bit of work done expeditiously, run a little risk, seeing that his wages depend upon his getting it done as expeditiously as possible.

20854. Then there are three main causes, you think, for accidents from falls at the face; incompetency, carelessness and the risk which men sometimes run in order to get a certain piece of work done. You think those are the three main causes of accidents at the face?—Well, they are three causes.

20855. Of course there are accidents which will arise in spite of every precaution?—Yes; pure accidents will occur.

20856. You think that by having men specially appointed either to do the timbering or supervise its being done, many accidents which now occur would be prevented?—I have a strong belief that there would be a great improvement if that were done, and it would tend very materially to reduce accidents from roof falls.

20857. (*Dr. Haldane.*) Do you mean a special class of official in addition to the fireman, or that the fireman should supervise the timbering?—If there were a special class of men for that particular purpose there would not be so much necessity for the fireman making either one or two inspections, because they could take that responsibility But my view is that the particular duty of these men should be to see that the timbering is properly set, because I look upon that as being all-important for safety.

20858. (*Mr. Smillie.*) And that would be the duty of the fireman if his district was small enough to enable him to do it, in addition to looking after the ventilation?—Yes.

20859. (*Sir Lindsay Wood.*) Should the person whom you appoint—the deputy or timberman—set the timber, or merely supervise its being set?—My suggestion is alternative; he could either do one or the other. If it was considered desirable—and I think it is most desirable—that he should set the timber, that should be adopted; but if there was too much opposition to a proposal of that kind, I think that he should thoroughly and closely supervise it.

20860. He should see that the men do it?—That the men do it—because I am free to confess that there is still a lingering feeling, among the old Scotch miners particularly, that they are the best men to set the timber in the working faces, because they are always there. You might have opposition from that source, but I think there should be thorough supervision of that.

20861. (*Mr. Smillie.*) Now I will ask you about the haulage accidents. You are aware that a very considerable number of fatal and serious accidents arise from haulage?—Yes, that is a very prolific source of accidents.

20862. Do you think it is safe to have a haulage road and at the same time a travelling road—I mean, to allow the haulage road to be used as a travelling road?—I would prefer there should not be any travelling on the haulage road; but if it was impracticable to have that, then I think there should be sufficient width between the rails and the sides of the road that the men would be able to walk absolutely clear of the hutches running, and possibly having manholes on the same side, in case of runaways, or anything of that sort.

20863. You suggest that where haulage roads are used as travelling roads there should be at all times sufficient room between the rails and the side to enable men to pass and repass for travelling purposes?—That is so, on one side.

20864. In addition to that, you think it would be necessary to have the manholes which are compulsory at the present time?—I think they should not be done away with, even supposing that width was provided.

20865. Would you suggest that it should be compulsory that all manholes should be periodically whitewashed?—I think so. These manholes ought to be made as easily

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discernible as possible, and if whitewashed it would help very materially in my opinion.

20866. Do you know of any system at the present time in force to prevent runaway trams or hutches, where the haulage is done in trains or rakes, causing accidents in the event of a coupling or drawbar breaking ?—I do not know of any system in our district which has been adopted specially; but we are continually advocating in our district that there should be what is termed a safety-chain either below or above the rake of hutches, so that if the coupling gives way this chain comes into action and so prevents an accident.

20867. That is a chain attachable at either end to the rope ?—Yes.

20868. Or, where it is a single road, attachable to the last hutch and the rope at the other end ?—Yes.

20869. There have been serious accidents arising from such breaks ?—Yes, there have been accidents from that cause.

20870. Would you be in favour of having runaway points or slip rails or single haulage roads, so that in the event of a rope breaking the hutches would be thrown off the road before they could be run far down ?—I think that would be an excellent thing if it could be put into operation.

20871. Now as to the question of colliery enginemen. Are you aware that during the past 20 years the number of men allowed to ride in cages in large collieries has considerably increased ?—That is so.

20872. I think it is admitted that there is a greater strain on engine-winders to-day, because of the largely increased output, than there was some years ago. I want your opinion about that ?—That is undoubted.

20873. (*Sir Lindsay Wood.*) In Scotland ?—In Scotland.

20874. (*Mr. Smillie.*) In consequence of the output having largely increased at the larger collieries there is a greater strain on the engine-winders now than there was some years ago at the smaller collieries ?—That is so.

20875. At the present time, in many of the large collieries in Scotland, the engine-winder is from eight to ten hours at his engine handle with a break of from 15 to 20 minutes ?—In our particular district I think it runs from 20 minutes to half an hour during his winding time. I should say he is there about nine hours, because it includes the winding of men and coal.

20876. And he has not half a minute's rest during that time except the 20 minutes' break ?—That is so. At one of our collieries which I had in my mind just now the engineman has not a minute, but is continuously winding.

20877. I believe you have no fault to find with the class of men who are enginemen generally all over the country ?—They are a pretty good class of men so far as my knowledge goes.

20878. Steady and temperate and skilled in their particular employment ?—That is so.

20879. But there are accidents arising sometimes from a sudden weakness—heart affection or something of that sort suddenly overcoming the engine-winder ?—I have not had experience in our district of a case from that particular cause, but I have heard of it. I can quite conceive it possible that a man may get suddenly ill and be incapable of attending to his engine when the men are riding in the shaft and I have always held that, during the time when the men are being drawn up or lowered, there should be two men at the engine handle, so that there should be no accident of that kind.

20880. Would you be favourable to the engine-winders holding a certificate of competency ?—I should.

20881. Do you think that is necessary ?—I think it would be a guarantee of his competency, the same as I would insist upon a manager having a certificate, or a fireman having a certificate.

20882. Is that your opinion that an engine-winder should have no other work to do but to attend to his engine ?—I think so.

20883. At the present time he is not confined absolutely to that ?—I understand his duties include attending to the boilers as well which may take him away from his handle—that is, to go out of the engine room and see that the boiler is all right. I do not mean to say that it is the case in places where there is continuous winding, because that is not possible, but one instance occurs to me just now where an engineman has to go and fire his engine such as I have seen in my younger days where the output was small.

20884. (*Mr. Ratcliffe Ellis.*) But there have been improvements during the last 30 years, Mr. Weir ?—Yes, there have been great improvements in that sort of thing since I was working in a mine.

20885. (*Mr. Smillie.*) Have you a large number of unskilled workmen in the mines in Fife ?—I think we have a good few. We have importations from other districts which seem to be getting more numerous than ever. A very interesting census was taken by one of our managers a few months ago of that particular matter.

20886. (*Mr. Ratcliffe Ellis.*) Was that the census which was put before the Eight Hours Committee ?—Yes; that was very interesting. He employed 1,398 men, and out of that number 450 were drawn from other trades and occupations, so that that was about one-third of the people employed—a large percentage. The rest of the men employed in that mine were those who, on leaving school, had started to work in the mines.

20887. (*Mr. Smillie.*) And those 450 had entered the mine at various stages ?—That is so. I do not mean to say that those men would all be employed at the face.

20888. Are there any figures given as to the number employed at the coal face ?—No, there is no indication of that.

20889. You are aware that there is a Rule in the Mines Act which is supposed to prohibit the employment of any person at the coal face who has not previously had two years' practical experience under a practical miner ?—Yes.

20890. Is that Rule generally carried out in Scotland ?—I cannot say. We try to insist upon it, but we cannot tell whether it is carried out or not. We have no way of detecting it.

20891. Do you think it is a wise provision ?—I think it is, and we fought for it in the House of Commons.

20892. In the interests of safety ?—Yes, in the interests of safety.

20893. If it is wise to prevent an unskilled person working alone at the coal face, would it be intelligent to allow three or four or more unskilled persons to work together ?—That is only increasing the evil. I think it would be a most dangerous thing to do that.

(*Chairman.*) Do I understand that your objection is to unskilled persons working at the face at all, or only to working without any skilled supervision ? Supposing you have a skilled man supervising two unskilled workmen at the face, is that what you would consider safe ?

(*Mr. Smillie.*) We have no objection to unskilled persons at the face if under the supervision of a skilled person, but it lends itself to this: we have cases where there are 12 or 14 foreign workmen at the working face under the charge of one person. You will have evidence of that.

(*Chairman.*) What would you consider would be a reasonable proportion ?

(*Mr. Smillie.*) We do not object to one skilled person taking one unskilled man with him to learn.

(*Witness.*) I think one unskilled person in a working face is quite sufficient to look after.

20894. In the Scotch mines we have a different system from what exists in England. It is largely the practice in Scotland for the lads to go to the working face with their fathers when they leave school ?—That is so. That is quite a common thing.

20895. We call a skilled Scotch miner a person who has been brought up at the colliery from 13 or 14 years of age ?—That is how it is looked upon.

20896. That is pretty generally the case ?—Yes. At our collieries the young people go in with their fathers and gradually learn to become miners. They also go with other men as well, not only their fathers.

20897. (*Sir Lindsay Wood.*) You say that there are only two District Inspectors in Scotland and four Assistant Inspectors ?—Yes, that is so.

20898. Do you know what number of men they have under them ?—I think they have about 127,455, including quarries.

20899. Do you think that the district is too large for so few inspectors ?—Yes, I think so.

20900. Would you advise the districts being divided and having more District Inspectors ?—I have never applied my

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mind to that point. What we aim at is to have an increased staff of Inspectors who will be subject to these two. I have never thought of dividing Scotland up into any smaller districts than what they are now.

20901. Do you think it would be an advantage to have more District Inspectors?—I do not say that it would be a disadvantage. For example, if we had a staff for Fife only, which is now getting a large colliery, it would be easy to get at the collieries instead of their living away from the colliery, and it requiring some time before it can be reached; I think that would be a good thing.

20902. You recommend one Inspector for every 10,000 men?—For even less than 10,000 men. That is what our Bill is.

20903. That would mean that you would require a great increase in their number?—We should require double the staff that we have now.

20904. You would require more than that. You have six now, altogether?

(*Mr. Smillie.*) We have only six for every 127,500.

(*Witness.*) We should require fully double the number.

20905. (*Sir Lindsay Wood.*) How long an interval would be required to get round the mines if the inspections were made as you deem they should be made?—I could not form an estimate of that. The Government Inspectors would be the best parties to give you some indication as to that, but judging by the inspection that is made now, when they can only make an inspection once a year of every colliery, and that a very incomplete one, it seems to me, by doubling the inspectorate, that you could not get them to make the inspection once in six months sufficiently.

20906. Not if their whole time is occupied now. That is a matter of arithmetic?—Precisely.

20907. I understand that you want to have these inspections made much more frequently than once in six months?—I would be satisfied if there was a fixture for making them at least once in six months, and, in cases of emergency, I think it is desirable that they should be made between those periods.

20908. That would not be examining the places throughout the whole of the mine. That would only be doing the work which they are practically doing now?—That would be a considerable improvement upon the present system, of course, and it remains to be seen whether that would be efficient.

20909. You say that Rule 38 has not been acted upon in Scotland?—Very little.

20910. What is the real reason for that?—I explained to Mr. Smillie that fear of giving offence to the employer was one reason. The men do not care to go into the mine of their employer and make a report that he might feel offended at, especially if they found any defects. The other reason I gave Mr. Smillie was that in the past, when these reports have been made, so seldom has a defect been commented upon, the idea has got abroad that there is no use in having the inspection made, seeing that there is no practical result.

20911. In some districts they do make these inspections?—I heard recently that they were making them in Lanarkshire.

20912. I mean throughout England, not Scotland?—I do not know what they do in England.

20913. We do not find that there is any conflict between the Managers and the men where they do make them?—I cannot speak of these districts, and I am not aware of anything arising out of them.

20914. You cannot give us any experience of these inspections under Rule 38?—Not so far as England is concerned.

20915. Nor Scotland, because you say that you have never had any made?—I said the last that we had in our district was in 1899.

20916. That is practically none?—Well, that is so. I may mention that when that inspection was made it was reported to us that the mine was in a very bad condition both as to the ventilation and as to general safety, and the parties who made the complaint were eventually appointed to make that inspection, which took some four or five days to accomplish, with the result that a most favourable report was made as to the condition of the mine. That gave rise to the notion among the men who appointed them that they had not efficiently examined the mine or given a fair or proper report.

20917. (*Mr. Ratcliffe Ellis.*) Who made that inspection?—Two of the workmen.

20918. At the mine?—Yes. The men who made the complaint were men who were working in the mine, and they were the men who were appointed. The two chief complainers were the men appointed to make the inspection.

20919. (*Mr. Smillie.*) And they found everything was all right?—Yes.

20920. (*Dr. Haldane.*) Was there any good reason for believing that there was anything wrong?—They made plenty of noise about it beforehand; I do not know. It is rather strange that everything was right after they had such a strong complaint to make about it a few weeks before.

20921. (*Sir Lindsay Wood.*) Under Rule 38 it seems to me that you get the men most acquainted with the colliery, and those men ought to know the defects of the colliery, to make the report rather than outside men?—I understand that they are the men employed at the colliery and most acquainted with it.

20922. If you want to have more inspectors appointed, why do you not take advantage of the rule which gives power to inspect?—We want more inspection paid for by the Government. Having had the experience that we have had of Rule 38 we think it is now obsolete, and that something better should take its place.

20923. It cannot be obsolete if you do not act upon it; in fact you have hardly tried it—It has lapsed; it has gone into disuse, practically.

20924. Then with regard to the appointment of firemen, you think that they ought to have a certificate?—Yes, I think so.

20925. Do you think that in Scotland that they are not appointed from the best men?—I am certain that they are not.

20926. It must be a matter of judgment, because surely the manager appoints the best men he can get?—I have given you two cases which have come under my personal knowledge, which clearly prove that they are not the best men who have been appointed.

20927. There are certain to be exceptions to every rule, but do you say that of the whole number which you must have in Scotland?—I do not mean to say that they are all the worst men that are appointed, but as a general rule I do not think that the situation of fireman is made as attractive as it ought to be; I mean with regard to remuneration and other things, so that it would draw the best class of men to apply for such jobs.

20928. Does not the example you gave of the fireman being underpaid as compared with the hewer apply more to where the wages of the hewer are extra high?—I do not think it does; I think it applies even when the wages are what may be termed at an ordinary point.

20929. Is the ordinary standard wage for firemen less than for hewers?—Yes, in some places.

20930. Is it so in many places?—I would not like to say a great many.

20931. Is it not the general practice that they are paid higher?—I do not think so.

20932. In Scotland?—Not in my experience.

20933. (*Mr. Smillie.*) Is it not universal that they are paid lower?—That is so.

20934. That is universal, all over Scotland?—No, I would not say universal. I know that some are paid 6s. 6d. a day in our own county.

(*Mr. Smillie.*) Hewers are earning more than that.

(*Sir Lindsay Wood.*) Is the normal wage of the hewer more than 6s. 6d. a day?

(*Mr. Smillie.*) The fireman's wage falls and rises with the hewers, so that keeps them in the same position.

20935. (*Sir Lindsay Wood.*) You think that they ought to pass an examination?—Yes, I think so. I would not make it a very stiff examination, but I think that they ought to pass some kind of examination. I think that it would be conducive to safety, and the passing of an examination would also give confidence to the men in the discharge of their duties. I also think that it would add to their efficiency, as it would enforce dis ipline in the mines. The men would respect them more, and they would take their word more readily if they were looked upon as being a class of superior workmen.

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20936. In Scotland you say that the firemen are used by the owners for getting the coal away. To what extent is that done ?—It is quite common for the firemen to look after the tubs and trams in order to see that they are kept going regularly, and if there is any hitch in that department he is supposed to have it put right and get matters put in order again.

20937. That would be in the working faces ?—No, on the roads.

20938. Do you mean the main haulage roads ?—The haulage roads and pony roads, and drawing roads and sidings.

20939. You mean up to the hauling station, not on the main haulage road going to the shaft ?—In a general way he would overlook all that was within his district.

20940. The meaning of that is that his whole time is not occupied at the face of the workings ?—Certainly not.

20941. It is the practice in Scotland for the men to set the timber ?—That is so.

20942. The fireman does not interfere with it, excepting when he sees that it is wrong ?—Where he sees that the men are not timbering their places as they ought to, or according to the rule laid down, he instructs them to put them right.

20943. He does not do it himself ?—No.

20944. Do you think that he ought to do it ?—I did not say that the fireman ought to do it, because that would increase his duties as a fireman ; but if there was a special staff of workmen appointed for that purpose they should do that, with a district allotted to them, as I have stated.

20945. A special staff of men to do nothing but the timbering ?—Yes.

20946. In that event you would still require the hewer and the man at the face to set his own timber to protect himself if something occurred while the deputy was not there ?—Certainly. Common sense dictates that a man would look after his own head and safety.

20947. It does not always do that ?—Well, I expect it should do.

20948. With respect to haulage, have you many mines in Scotland where there are separate travelling roads ?—No, I do not think that we have many ; I do not know of any in our district.

20949. Are they old mines ?—We have old mines and very modern mines, too.

20950. Have you many heavy incline engine haulage roads ?—Yes.

20951. Are they on the level ?—No, they are inclined.

20952. Both from the shaft and to the shaft ?—Yes.

20953. Have you many accidents upon these ?—We have a good many haulage accidents in Fife. I think that we have a full share of the haulage accidents, for this reason : we have considerably deep workings. The wheel braes are numerous, which lends itself to considerably increased chances of accidents, and I think that they produce as many of these accidents as any county ; I mean in proportion to its size. We have them driving to the rise one single drift going where these wheels are absolutely necessary owing to the steepness, and they shift it from time to time as the workings recede.

20954. That system is rather more dangerous than ponies ?—Yes.

20955. That is the reason that you get more accidents ?—Yes. In connection with these braes where accidents have occurred they have arisen in this way : the boy or man at the bottom of these braes, particularly these single braes where they supply one face, does not take the trouble to put mouth plates or pointers at the bottom, but just have the rails squarely set, and the party at the foot of the brae has to watch when they start the wheel to guide these empty hutches on to the rails, and when a runaway takes place if the man at the bottom forgets anything, that is to say forgets to couple his hutch on, this hutch comes down like a shot, and we have had several fatal accidents in consequence of that, whereas if these pointers were on, it would require the man to put the hutch there and couple it on and withdraw it, and it would take the rails itself. I think that should be made compulsory.

20956. It would be a very difficult provision to put into an Act of Parliament, but I should think that every mining engineer would do it for his own good ?—It is a very simple thing and gives the man an opportunity of withdrawing out of danger.

20957. Do you think that many accidents occur in consequence of this ?—We have had one or two accidents purely on account of that.

20958. You do not have endless ropes ; I suppose it is too steep ?—I do not know of any endless ropes in Fife.

20959. They are only used on the flat ?—Yes.

20960. There are much less accidents with them because they go slowly ?—I should fancy that they were not so liable to accidents on flat workings.

20961. I think you recommend that there should be some shortening in the hours of the winding enginemen ?—I think that the enginemen should not be engaged more than 8 hours at the very most.

20962. You do not have many accidents in your district ?—We have many winding accidents. We have had one quite recently which resulted fatally, caused by a bit of wood going down the shaft and killing a man in the shaft. That happened with a young engineman.

20963. I see by the Return that there are only three fatal accidents and four men killed in 10 years from overwinding ?—In Scotland ?

20964. Yes.—This accident happened last year or the beginning of this year, but I could not exactly fix the date.

20965. There is not much room for improvement ; there are other places where we get more. Do you say that the engineman went away to fire his boilers ?—No ; that used to be the custom when the output was very small ; he attended to the firing of the boilers as well as attending to the engine, but where the output is large that is not possible. He has, however, sometimes to go out of his engine on to the top of the boiler to see how the boilers are keeping, to see to the feeding and what not.

20966. His attention cannot be constant during the time that he is away ?—That is so. I think that an engineman should be entirely confined to the winding of the engine, and that his attention should be devoted to that entirely.

20967. Whether he has other work to do or not. Supposing he is only winding a few times in an hour ?—That is a different thing altogether.

20968. It is a question of degree. It depends entirely on the degree ?—Of course I would not say that a man should stand idle altogether. I am speaking now of when they are running at a high pressure speed, and then I say there should be a provision that a man should not be allowed to go away from his engine.

20969. Are there any engines running with two enginemen ?—Yes.

20970. Those are running at a very high tension ?—Yes.

20971. Is it the practice, where they are pumping underground, for the engineman to keep his boiler going as well ?—I could not venture an opinion upon that. When they are pumping underground my impression is that they get the steam from the top, but I think that electricity is now taking the place of steam for work of that kind.

20972. That is now being done ?—I believe so.

20973. (*Mr. Ratcliffe Ellis.*) What is your view as to the object of Government inspection in mines ?—My view is a very simple one. It is that they should visit the collieries and see that the management is carrying out all the operations in conformity with the Coal Mines Regulation Act and the Special Rules, and general safety I should add.

20974. It is quite impossible, I think, that there should be any system of Government inspection (I will refer to Rule 38 afterwards) day by day ?—I do not suppose that we would ask for that.

20975. To carry it to an extreme length, you would wish that day by day there should be some security that the Coal Mines Regulation Act was being carried out in every mine ?—I did not say so, because I believe that to be, so far as Government inspection is concerned, impracticable.

20976. Then we agree there. How near do you think you that can get to that ? The idea would be to see that in every mine every day the Coal Mines Regulation Act was being carried out. You admit that it is impossible to get that from Government inspection ?—We are not asking for that.

20977. You agree with me that it is impossible. I want to know how near you can get to that ?—We have, through

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our Mines Bill, asked for a Government Inspector for each 10,000 men employed in and about the mines. We think if the inspectorate was increased to that extent it would improve matters.

20978. That would mean about 80 inspectors instead of about 40, as at present ?—Well, suppose it did ?

20979. What do you expect you would get from these 80 men ? How often do you suppose that each mine in the Kingdom would be inspected ?—That I could not venture to say, as I told Sir Lindsay Wood, but I suppose that it is not too much to ask that they should be inspected once in every six months.

20980. If inspected once in every six months you would have to assume that what the inspector saw at that inspection represented the normal condition of the mine ?—The inspector would just have to form his own conclusions.

20981. He would have to conclude that. If he were satisfied, he would have to conclude that what he saw then represented the normal condition of the mine ?—I understand that he would take that for granted.

20982. Do you see any reason why he should not obtain the same information if he inspected once a year instead of twice a year ?—It is not possible, in my view, that he could. You might as well say if he examined it once every three years that he would have the same opportunity of correcting what was going on wrong,

20983. It is a question of degree ?—Yes.

20984. Then you think if he inspected twice a year that he might reasonably assume that what he saw was the normal condition of the mine ?—It would have a tendency to keep things better.

20985. That is with reference to inspection by the Government inspector ?—Yes.

20986. With reference to grades of inspectors, do you propose that there should be a class less qualified than the present inspector amongst these additional inspectors ?—I was proposing that practical men who held certificates, either first or second-class certificates, should be eligible to take up that work under the direction of the district inspectors.

20987. Are they not eligible now ?—First-class holders of certificates.

20988. If they can pass an examination by the Home Office ? That is so.

20989. Do you wish to do away with the Home Office examination, and make either first-class or second-class certificates sufficient ?—I would not ask you to have as stiff an examination for these inspectors as you would have for the chief inspectors.

20990. Why not ?—I do not think that it is necessary. In fact, my main reason for holding that view is, that there would be a tendency to limit the selection from good and practical men.

20991. Why should it limit the selection from good and practical men ? I understood you to say that you had no complaint to make against the present inspectors, except that there were not enough of them ?—Yes, that is so.

20992. What do you suppose would be gained by having an inspector less qualified than the present inspectors ?—I do not say that they would be less qualified. I hold that practical knowledge is equal to a great deal, and that practical knowledge, plus his theoretical knowledge gained by his study for his certificate, would make him an excellent adjunct to the inspectorate.

20993. Every man who gets a certificate is required to have had five years' practical experience about a mine ?—About a mine, but not——

20994. I want to know what class you say that the inspectorate should be. Must it be confined to a man who has worked at the face ?—That is my view.

20995. Take a man who has been engaged in a mine, say a young gentleman who is a pupil at a colliery, and who is down the mine every day inspecting and examining it: do you think that, because he has not worked at the face that he should be disqualified for one of these posts ?—If he has the practical knowledge equivalent to a man working at the face, I do not say that I would object.

20996. What is the special knowledge that a man gets for the purpose of inspection by working at the face ?—The special knowledge that he gets is a knowledge of the dangers that arise through falls of roof, and what not.

20997. Is that the sole object of inspection; I am speaking about Government inspection now. Can you suggest any special knowledge that a man gets from working at the face to qualify him for a position of an inspector; I mean, any more than a man gets by making the inspection all over the mine ?—I think his practical experience goes a long way to qualify him.

20998. Because he has got coal ?—Not because he has got coal exactly, but if he holds a certificate such as I have indicated, I think his practical experience gives solidity to his knowledge which a man who has not had that work to do has not got.

20999. Any person who has had practical experience of examination in a mine, or of doing anything down a mine except coal getting, you would exclude from the chance of getting one of these appointments ?—I would not go so far as that. If a man had been engaged as an overman, or as a fireman, or in any other department, I do not say that he should be excluded.

21000. Do you not think that a man who has been engaged in that work would be better qualified to discharge the duties of an inspector than a man who has been merely engaged in working at the face ?—I do not think that he would be any better.

21001. I want you to come as near to my view as you can. Do you not think he would be better qualified than the man working at the face, because he has been engaged in making an inspection as to the general condition of the mine, which is what an inspector has to do ?—I believe that you are perfectly correct in what you are aiming at, but I believe that a man engaged as an overman holding a certificate, going through the mine inspecting it, would be better qualified than a man who had never done that work.

21002. A man who has done that is a practical man, whatever his class may be ?—Yes.

21003. It is not a question of class at all. Whatever class he comes from, if he has had that experience and obtained a certificate, he should be eligible to inspect ?—That is so.

21004. Do you think that some inspectors should not be bound to pass the examination of the Home Office ? Will you tell me why you think some class of inspector should be exempt from that ?—The only reason I can give is this: I understand qualification for the examination for an inspectorship just now is a thing that a great many of our men would not face very readily.

21005. Why should they not qualify themselves for it ? There is nothing that a Scotchman cannot do if he puts his mind to it ?—They are supposed to be hard-headed, but what is in my mind is this: Suppose this class of inspectors were created, and these men were appointed with an examination of some kind, but not so stiff as the Home Office examination, before they could be promoted to hold a district inspectorship, my view is that they would have to undergo a further examination in order to test more fully their knowledge of mining. I mean more fully than when they were examined before.

21006. I see in your Bill you say: "The assistant inspectors shall be generally under the control of the senior inspector of the district, and may perform any of the duties of an inspector which may be delegated to them, either generally or in special cases by the inspector, and shall also perform any duties which may be assigned to them by a Secretary of State." Therefore you contemplate that they may perform all the duties of an inspector certainly for the duty of inspection. This additional inspectorate is for the duty of inspection: you think that there is not sufficient inspection, and you want a further inspection of the mines. If he is to perform the same duties as the chief inspector, why should he be less qualified ?—I do not say that he is less qualified in the least. He holds the certificate as a manager, for example, but all that I claim exemption from is that he should not be asked to undergo the stiff examination that is now necessary.

21007. If I understand you rightly it is because a particular class of persons would not be able to pass it ?—I do not say that they would not be able to pass it.

21008. Then why should not they pass it ?—I do not see that it is necessary that they should be so particular in insisting upon that high class examination for a subordinate position of this kind.

21009. That is your view ?—Yes.

21010. With regard to the French system of inspection, do you remember after the Courrières accident that difficulties arose with reference to what they called the engineers, and the men revolted against these engineers being put in charge of the work and examining the mines ?—Yes.

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21011. Were those Government inspectors?—I could not say whether they were or not. I think, from my reading of the reports of the accident, that these engineers were employed by the company, but I am only speaking from recollection.

21012. You do not know that those were the Government inspectors, and that it was thought by the practical managers that they could possibly do better without them?—You do not know whether that was so or not?—No.

21013. So much for the inspection. Do you recognise that it is desirable that the manager of the mine should have the responsibility for seeing that the Coal Mines Regulation Act is carried out?—I do.

21014. Do you think that it would be a very unfortunate thing if anything was done to lessen that feeling of responsibility?—I do not see why anything should be done to lessen it.

21015. That is not the point. You think that it ought not to be lessened, and that it would be prejudicial to safety if that feeling was lessened?—That is so.

21016. Do you think that a too frequent inspection (I am not discussing now how often it should be) might not result in relieving the manager from responsibility?—I cannot see it.

21017. A manager might say: "The inspector has seen it, it is all right," and so on?—I cannot see it.

21018. You do not think that would be so?—I do not think that there is a possibility of it. If an inspector came to a colliery and said that there was nothing wrong, and there was really something wrong, I do not see why that inspector should not be blameworthy as well as the manager.

21019. Now I want to ask you, with reference to inspection under General Rule 38, you quite agree that it would be reasonable that a mining engineer should not be permitted to make that inspection?—I have said so.

21020. Why?—I have no particular reason to give.

21021. I want to know what your reason is?—It is because the employers insist upon it.

21022. I understood that you thought it was reasonable, and I want you to tell me why?—I have no reason to give further than we concede that to the employers because they ask for it.

21023. Will you tell me why you think it reasonable?—I suppose that the employers consider that they would not like professional men to come and see things about their collieries that they do not want them to see.

21024. They might come and get information apart from the ostensible object of coming for the purpose of inspection?—Yes.

21025. Might not this be the case with the itinerant inspectors you propose to appoint?—I do not think so; they would be drawn from a different class altogether.

21026. They are to be under nobody's control but yours?—We should have the appointment of them, but that would be a matter for the——

21027. Are you aware that the Government inspectors are under very strict regulations with reference to what they may and what they may not do in connection with their inspections?—Yes.

21028. Do you think that is reasonable or necessary?—I do not think that it is unreasonable. I do not think it unreasonable that there should be some limitation.

21029. Do you not propose that employers should be protected against the misuse of this power of inspection with regard to these itinerant inspectors to be appointed by you?—I cannot see that there is any possibility of misuse of an inspection of this kind, so long as a manager keeps his mine in a condition which conforms to the Coal Mines Regulation Act and the Special Rules.

21030. Supposing that there is some dispute with reference to a price list in connection with some part of the mine, and the miners' agent went down ostensibly for the purpose of inspection, do you not think that he would have the means of causing a good deal of embarrassment and trouble if he chose?—We do not for a moment consider that that would come within the scope of these inspectors at all; I mean, to go and inspect the mine for the purpose of settling the price list.

21031. What is to exclude them from doing it? I want to remind you of your Bill and the powers that you propose to give to these men. "The following rule shall be substituted for rule 38:—'Rule 38.—(1) The workmen employed in any mine may from time to time appoint any persons who are or have been practical working miners to be examiners of the mine on their behalf. (2) Such examiners may at any time examine the mine or any part thereof, or any old workings, shafts, machinery or apparatus connected therewith, and every facility shall be afforded for any such examination by the owner, agent, and manager of the mine, and by all persons in the mine. (3) The examiners shall make a report in writing of every such examination, and shall communicate the same to the workmen, either by placing it in a book to be kept by the workmen for the purpose, or by reading it to a meeting of the workmen, or in such other manner as may be from time to time determined by the workmen. (4) If the examiners in any examination consider that any danger exists or is to be apprehended in the mine, they shall make a report in writing to that effect to the inspector of the district.'" You propose to give very large powers to these inspectors, but there is not a word here said about reporting anything to the manager of the mine. It is all to be done behind his back. I put this to you: if there is an objection to a mining engineer coming for other purposes than inspection, is there not the same objection to a miners' agent coming?—I do not see any objection.

21032. Can you imagine that a coalowner sees a good deal of objection to it?—I cannot see any objection so long as the colliery is conducted properly.

21033. I am assuming, if he has a right to come, he has a right to come there for any purpose he may choose to go down the pit for. Can you see that it is reasonable on the part of the coalowner to say that the person who has to make that inspection should be under strict regulations not to use the information that he gets to the prejudice of the owner?—I should say that he should be protected against anything that could be used to his prejudice.

21034. How would you propose to protect him?—I have no idea; I have never applied my mind to that. It never occurred to me that that was possible. I mean, that information could be applied to the prejudice of a coalowner in a mine which, properly conducted, and all I understood that these men should be empowered to report, either to the inspector or to the workmen, was any defect in the mine, or the case of any regulation being violated; and if you think it is prejudicial to the coalowner for them to make reports of that kind, I am afraid I cannot agree with you.

21035. I do not at all. The men at the pit, you agree, are the most competent to make an inspection for the purpose of safety. The men who are working in the mine know the pit, and if it is a pure question of safety, they are the most competent persons to make an inspection?—In one sense they are the most incompetent men, because they are not free agents.

21036. For the purpose of safety the men working in the pit are the best persons to make the inspection?—Providing that they were free agents.

21037. Do you know any case in which any man has suffered in any way at any colliery through having exercised his power?—I have no case I can name.

21038. Then why do you suggest this?—It is difficult to find cases of that kind, because these cases can be dealt with in a manner that we cannot discover very readily; besides, what I have told you about these inspections is sufficient to cover these points. I have told you that we have scarcely ever had any defect reported, and this is why the men have got lukewarm in making these appointments, because they do not see that there is any practical result.

21039. The reason you have had no bad reports is that there is nothing bad to report?—I did not assume that.

21040. The only case which you have given to the Commission is a case in which there were very serious reports made: but the men at the pit examined it and found that everything in it was all right?—They reported so; I do not say that they found it so.

21041. I see that Mr. Ronaldson, one of the Government Inspectors for Scotland, gives another reason why these examinations are not made. It is Q. 4980: "Do you suggest to the owners and the men that such inspection should take place?—(A.) I have suggested it, but I have been met with this reply—that the Government Inspectors are paid for inspecting, and the men are not going to do it"—that is the reason that he gives.—"I do not say that is the general feeling, but that is the reply which has been given when we have spoken about the matter?"—In our district I have never heard that put forward as a reason.

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21042. The alteration that you want is, that this General Rule should be extended, and that these very wide powers, entirely uncontrolled by anybody, should be given to an itinerant inspector to be appointed by the worker, to go wherever and to go whenever he thought fit ?—I want what we have in the Bill. We do not want the wide powers such as you interpret them.

21043. Is not that what you are asking for in the Bill ?—No ; I do not agree with your interpretation.

21044. There is not much difference of opinion about that. You agree that this man who makes the inspection should be under some control, so as not to use it prejudicially to the employer ?—If you think that requires to be safeguarded, I have no doubt that the Commission will know now to safeguard it.

21045. If the Commission thinks this power should be extended, would you be prepared to say that it should be subject to the inspector not using any information to the prejudice of the owner ?—I should think that is perfectly fair. All that he has to report on is as to the general safety of the mine.

21046. And that he is not to do anything in connection with reporting which may prejudice the owner ?—Yes, I think that is fair.

21047. If he reports adversely, it is to be solely on the question of safety ?—Yes. I have safeguarded myself by saying that.

21048. Now I will ask you about the firemen. I am quite sure we have known each other long enough for me to know what you have said here is what you quite believe is the state of things, but, after all, it is from information given to you by somebody else ?—Chiefly.

21049. During the last 30 years you have had no experience as to the way the firemen do their duties ?—I have never been underground much.

21050. Can you submit to the Commission any evidence from people from whom you get your information as to the negligent way in which the firemen discharge their duties ? —I have made enquiries frequently, and it is matter of common talk among our representative men, when the subject is under discussion, that the duties of the firemen are performed in the way I have described to the Commission.

21051. I do not want to ask you to give it if you feel that you should not give it, but can you give any collieries where you say that this is so, in order that it may be enquired into ?—I think you may take the whole of the collieries : I do not think that there are many exceptions.

21052. In the whole of the collieries I understand you to say that there is no examination of the roadways ?—That is my information. In fact that was my experience when I was in the mine myself.

21053. How long have you known that, because you put that as being a great source of danger ?—It has been known to us for years and years, and it has been known to the managers, and it has been known to the Government Inspectors.

21054. I want to read to you from the special Rules under the Coal Mines Regulation Act, 1887, printed by permission of the Joint Committees of the United Mining Associations of Scotland. Rule 35 says : "It shall be the duty of the fireman, or firemen, if more than one, in their respective divisions and shifts, to perform the duties of inspecting not more than two hours immediately before the commencement of each shift, the roadways, working places, and every part of the mine situated beyond the station, or each of the stations, appointed at the entrance to the mine, or different parts of the mine, in terms of the Statute, and in which workmen are to work or pass during that shift, and to ascertain the condition thereof, so far as the presence of gas, ventilation, roof and sides, and general safety are concerned. The above inspection shall be made with a locked safety lamp, unless inflammable gas has not been found within the preceding twelve months, which it shall be the duty of the manager or under-manager to ascertain and intimate to the fireman, and in every case where the mine is worked with safety lamps. For the purpose of this rule, two or more shifts, succeeding one another without any interval, are to be deemed one shift. In making the above inspection the fireman shall mark with chalk the day of the month upon the face of each working place, as 1, 5, 10, 25, or other numbers as the case may be."

"(36). In the event of the fireman finding either the ventilation or roof and sides defective, or anything affecting the general safety of the mine between the pit bottom and the station underground, he shall at once return to the pit bottom and report so as to prevent persons descending."

"(37). He shall record without delay in a book to be kept at the mine for the purpose, and accessible to the workmen, before commencing work, where obnoxious or inflammable gas (if any) was found present, and what defects (if any) in roofs or sides, and what (if any) other source of danger were or was observed in his inspection before commencing work, and such Report shall be signed by, and so far as the same does not consist of printed matter, shall be in the handwriting of the fireman who made the inspection."

"(38). He shall be careful to ascertain that every part of the mine and roadways, so to be examined, is free from fire-damp, choke damp, and other impurities, and is safe for workers to enter and to work therein ; and in case fire-damp or other impure air shall be discovered in any working place, road or level, the fireman shall, in the first instance, thoroughly clear the same of such impurity—if that can be done easily—and shall thereupon report to the miners and other workers, that the same is safe : but if the impurity cannot be readily or at once cleared out the miners and workers shall not be permitted to enter any such working place, road, or level, or, if the accumulation be dangerous, into any place ventilated with the current air which has left that place until the impure air shall have been, by further appliances, entirely dispelled. He shall prevent miners or other workers entering the roads of working places until a report shall have been made that they are safe. If no fire-damp, choke-damp, or other impurity shall be discovered, or suspected to remain after such inspection, the fireman shall make report to the miners and workers, and allow them to proceed to work."

I will not read the whole of them, but you say that you have been aware, and the men have been aware, that these Rules have not been carried out for years past ?—They have not been sufficiently carried out.

21055. What steps have you taken to see that they should be carried out ? The fireman has to examine both working places and roadways. What steps have you taken to prevent this great danger which exists through the fireman not doing the work which by the Special Rules he is required to do ?—We have not taken any steps, because it is common knowledge to the Government inspectors themselves that this is not done.

21056. That is going rather a long way ?—No.

21057. Have you communicated with the inspectors ? —No.

21058. Then you have done nothing ?—In that respect we have not done anything.

21059. You have sat down and left this state of things. I want to read to you another passage. But tell me, first of all, what is a roadsman ?—He looks after the roads and examines the chains and other things.

21060. Will you look at Rule 47 : "The roadsmen, in their different divisions and shifts, if more than one, shall, at least daily, make careful inspection of the whole roadways from the pit-bottom throughout the mine where men are to work or pass, and shall keep the same free from all obstruction, and of the height and width necessary for proper passage and for ventilation." Have you allowed that rule to be a dead letter ?—Not that I am aware of.

21061. Have you done anything to see that the roadsmen keep the roadways free from obstruction and of the height and width necessary for proper passage and ventilation ? —You must understand that it is difficult to prove when these rules are violated.

21062. Do you not think that you should be a little more careful in telling the Commission that these duties are neglected in this wholesale way ?—We know it is. I am only telling you what I know.

21063. Can you put before the Commission any evidence of any colliery in which this state of things exists ? Why did you not communicate with the inspectors if you had known these rules were being systematically broken for years ?—Simply because the inspectors knew as well as we did.

21064. That may or may not be an answer, but still you did not think it worth while to do it ?—We did not do it.

21065. Did you make any communication to the managers of these different collieries where this had been neglected ? —I never got instructions to do so from the men, and it may be pointed out that the men themselves are very

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dilatory in taking up a position to give me instructions, even assuming I am their agent to make complaints of that kind.

21066. You know that the inspectors are always ready to receive any complaints, anonymous complaints, and they immediately make enquiry into them ?—I have made complaints to the inspectors when I have found danger exist, and they have been immediately attended to.

21067. In this particular case, which you consider a great source of danger, you have not made any report either anonymously or directly to the inspector, calling attention to the breaches of these rules ?—I have not had instructions to do so.

21068. Now with reference to timbering, some of your colliers think, and a good many people agree with them, that the collier is the man who can best look after his own safety with regard to the timbering ?—That is quite a common impression.

21069. In your own view is not that so, that the collier is the best qualified to protect himself from falls of roof, by putting his own timber up ?—Provided he is a trained collier.

21070. I suppose these old men you speak of are trained ?—Yes.

21071. Where did they get their training ?—By experience in the mine.

21072. That is the way everybody gets it. If a man is not allowed to work more than two years at the face alone, he gets it during that two years ?—Yes.

21073. Do you suggest that a collier should not do his own timbering, but that it should be done by somebody else ?—I have suggested that it should be done by somebody else with a view to reducing the number of accidents.

21074. The deputy, or whoever the official is who is going to put the timber up, cannot always be there ?—That is so.

21075. Supposing the collier wants some timber put up, is he to stop till the fireman puts the timber up ?—No, he should be at least directed to look after his own safety, provided there is any danger.

21076. What would be the objection of your old colliers to anybody else doing the timbering ?—Because they think they can do it better themselves.

21077. Safer ?—They would have that impression, no doubt.

21078. You know Mr. Hancock, of Nottingham ?—Yes.

21079. He was asked this question with regard to timbering at *Q.* 20,397 : " With regard to timbering do you suggest that it should be the duty of some mine official to go round to the working places constantly with a view to looking after the timbering, advising a man as to what he should do with regard to the timbering, at all events, if an inexperienced man ? — No, I do not know that I suggest that ; in fact it is to some extent done now with regard to all the men." You know in his district the men do the timbering ?—The same as others.

21080. Except Northumberland and Durham ?—Yes.

21081. Have you noticed the statistics from falls of roof? It is only in the working places that the collier does timbering. The timbering is done by the roadsmen in the road ?—By brushers and repairers in the road.

21082. In the Midland District, taking the five years ending 1900, there is a death rate per 1,000 persons employed underground of ·58 as compared with Northumberland and Durham and the Newcastle districts, where the timbering is done by officials, of ·65 and ·75, so that in the Midland district where the timbering is done in the way that your old colliers think it should be done, by the collier, the death rate is lower than in Newcastle and Durham, where the timbering is done by the deputy ?—Yes.

21083. So that it is not all in the favour of safety ? It might have been on the roof.

21084. I daresay there are reasons, but still it is so ?—Have you any information as to the character of the roof comparatively in the districts you have quoted ?

21085. It may be that has something to do with it, but still it is a matter of fact where the timbering is done in that way it shows the smallest percentage of any place in the Kingdom. I notice in your Bill with reference to timbering that you do not make that suggestion that anybody else should do it ?—No.

21086. What you suggest is to amend Rule 22 as follows : " Where the timbering of the working place is done by the workmen employed therein, suitable timber shall be provided at the working place by the owner of the mine, and the distance between the sprags or holing props where they are required shall not exceed six feet, or such less distance as may be ordered by the owner, agent, or manager." All you suggest in your Bill with reference to timbering is that instead of the management leaving the timber at the gate-end or pass-by, and the collier or his drawer taking his timber from that point to the working place, that the management should take the timber to the working place ?—That is what is suggested in the Bill.

21087. That is a question of wages, is it not ? It is relieving the drawer and collier of something he has had to do now, and included in his tonnage rate ?—That may be so if it is a long way to bring the timber.

21088. That is a question which would affect wages ?—It would have a very slight effect on wages under ordinary conditions.

21089. That is all you say in your Bill as to the reformation as to timbering. Now as to haulage accidents, you suggest that there should be sufficient room for passage in the travelling roads ?—Yes.

21090. Is there usually room now if it was kept clear ?—No, not that I know of. There may be a road here and there with room.

21091. Have you the Special Rules there ? Rule 47 says : " The roadsmen, in their divisions and shifts, if more than one, shall, at least daily, make careful inspection of the whole roadways from the pit-bottom throughout the mine where men are to work or pass, and shall keep the same free from all obstruction, and of the height and width necessary for proper passage and for ventilation." What more do you want than that ?—Proper passage of what ?

21092. Who passes there ?—I suggest a sufficiently wide road that a man can pass between the hutches and the side of the road.

21093. What is the meaning of this : " of the height and width necessary for proper passage " ?—It may be for proper passage of the trams only, and ventilation.

21094. Will you just look a little before that : " Where men are to work or pass "—men, not trams ?—That does not define that the road is to be sufficiently wide to give a space of two feet.

21095. It says it must be sufficiently wide for men to pass, because, on reference to the roadways where men are to pass or work—— ?—If you interpret that to mean that, that roadway is to be sufficiently wide for men to pass the hutches as they are being hauled.

21096. That is the rule ?—We have not been able to get that. I do not think it has ever been interpreted to mean that.

21097. There is insufficient room now ?—As a rule.

21098. You have no complaint about manholes except that they should be whitewashed to show where they are, and kept clear ?—We have had complaints about manholes, but we have had these remedied when our attention has been drawn to them. Sometimes they are filled with dirt.

21099. That is contrary to the Act of Parliament ?—Yes. We get that put right when complaint has been made.

21100. The inspector would get that put right directly they tell him. With reference to runaway trams you want some system by which, as far as practicable, if the trams run away, somebody should be responsible. Everyone wants to have that ?—That is so.

21101. With reference to enginemen, while the man is winding he must be at his engine ?—Yes.

21102. In your Special Rules he is required to make a general supervision. Special Rule 22 says : " He shall see that the engines and boilers are always in good working condition, that the pumps and whole machinery and gearing connected with his engine are in a safe and effective state." You do not object to that. That does not necessarily take him away from the engine when the engine is at work ?—That is so.

21103. Do you think that that ought to be deputed to somebody else ?—If his attention is to be constantly engaged in winding it should be deputed to somebody else.

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21104. You think if he has to do the winding he ought tc do nothing else ?—If he is constantly employed at winding, as in some collieries they are, it must be done by someone else.

21105. Do you know that a Select Committee of the House of Commons sat to consider the provisions of a Bill introduced to give engine-winders certificates ?—No, I have not seen anything about that.

21106. You do not know that they reported that it was not necessary ?—No, I have not heard any information about that.

21107. Will you tell me why you think that enginemen should have a certificate ?—Because it would be a guarantee of his efficiency.

21108. What do you consider the qualifications of an engineman ?—To know his work, to understand the mechanism of his engine and steam boilers, and what not.

21109. I suggest those are the least. You can ascertain that by the examination. Is not nerve a qualification ?—You cannot get that by examination.

21110. Is not that one of the principal qualifications for an engineman ?—A steady engineman, a man with nerve and resource.

21111. And character ?—Yes.

21112. Those things ycu cannot get by examination ?—Probably not. You could learn it by examination, but you could not give him a certificate of that.

21113. There is no class of men who do their work better than the enginemen ?—As a rule I have no fault to find with them in our district.

21114. As to these unskilled workmen, are you alluding to these foreigners, these Poles ?—Those, among others. The statistics do not allude to Poles, because there is not a Pole among these.

21115. These men are working on the roads ?—I cannot tell you.

21116. With reference to a collier, he must have some training, according to the Act of Parliament, whatever it may mean. There is nc statutory regulation with regard to a man who works on the roads as to what his qualifications should be, as there is in the case of a collier ?—I did not follow you.

21117. There is no statutory regulation as to the qualificatcn of any workmen down below except the collier. The collier must not work unless he has been two years at the face alone ?—I see the point now.

21118. There is no statutory qualification required ?—No, unless an under-manager.

21119. You must select competent people to do the work of inspection, but working on the roads and getting stuff out of a mine does not require any special qualification ?—No.

21120. You are aware it is suggested if the hours of labour underground are limited a great many more people will be required for that kind of work ?—It is suggested.

21121. Where are they to come from ?—I do not know that they are required. It is a matter for experience yet to know.

21122. Do you suggest that there should be some qualification required for a person who works in a mine other than the collier and inspector and officials ?—Do you mean about the two years ?

21123. I am not alluding to the collier now, but to any other person engaged in the mine other than the officials ?—Some qualification should be imposed upon them before they get promoted to another position. We have never imposed anything of the kind.

21124. I do not know what your complaint is about unskilled labour. It does not apply to the collier ?—The only complaint we make about unskilled labour is where any danger arises from its employment.

21125. Where is it ? What labour is it you consider now ?—We are frequently told that the men who do not speak the language cannot understand the orders given.

21126. That is the Poles ?—Yes.

21127. With regard to the people who can speak a language which is understood, you would not exclude them from any class of labour ?—We are not seeking to exclude them.

21128. The source of danger from unskilled labour is people who cannot understand the language ?—That is said to be a source of danger. We have not any Poles in Fife.

21129. It is confined to the employment of these Poles. Have you had a translation of the Special Rules into their language in Scotland ?—I understand they have had them.

21130. Where is that ?—They are not in our district, because we have no Poles at all.

21131. They must be on the other side ?—You will have that from other witnesses.

21132. I do not know whether you agree with Mr. Ronaldson who gave evidence as to the want of care on the part of the men. Did you see what he said about that ?—I do not know that I have seen that particular part of his evidence. I have dipped into some parts of his evidence, but I have not that part in my mind.

21133. He gives a quotation from his report (Q. 5013): "It is obvious that in order to prevent accidents, so far as it is possible to do so, carefully-considered regulations have to be laid down, but it is equally obvious that, unless these regulations are complied with by the workmen and enforced by the officials, the desired object will not be attained. Year after year disregard of the regulations is the direct cause of a large number of preventable accidents. There is a spirit of defiance against discipline at work among many of the miners, which is very much to be regretted, and to this I attribute many of those lamentable accidents which never ought to have occurred. To trace the origin of this state of matters one has to go to the homes in which these miners were reared as children. It will be found, I believe, that as children they have not been taught there the duty of obedience and of subjection to proper discipline. The consequence is that they grow up with the impression that they are their own masters, and they become impatient of restraint. When they enter the mines they carry these ideas with them, and when they are met there with restraints imposed upon their free actions by the stringent regulations, there is a constant conflict between their undisciplined wills and the wills of those whose bounden duty it is to see that the regulations are enforced."—That description does not apply to the Fife miners.

21134. (*Mr. Smillie.*) How do you know ?—Because I have been going in and out among them.

21135. (*Mr. Ratcliffe Ellis.*) You do not agree with that ?—I do not agree with him ; it does not apply to any miners I have come in contact with.

21136. (*Dr. Haldane.*) I should like to ask your views about improved sanitation in mines which you refer to at the end of your statement. What steps would you suggest ?—That is in reference to preventing the introduction of the miners' worm disease.

21137. Do you think there is much need for conveniences underground, for instance ?—In mines where there is the possibility of this disease being introduced, I think there is, because we are getting foreign workmen amongst us now, and it may be developed before we know much about it, and if there were conveniences put into the mines it would very much help to prevent any development of the disease.

21138. Is the working face usually fairly dry in the Fife mines ?—In some places it is wet, and in some places it is fairly dry.

21139. There are places where it is wet ?—Yes.

21140. And fairly warm ?—Our temperature does not go high yet, but we are getting into a condition of things with deeper mines which will bring about this state of matters.

21141. As a rule in the deep mines in England the working face is dry, so that there is less danger of miners' worm disease at any rate. I do not know whether that is proved so in Fife ?—We have never got nervous over this matter in Fife. We do not think there is any immediate danger.

21142. You have never gone into it very specially then ?—No.

21143. There is a matter you have not mentioned in your statement. Have you considered whether it is desirable to provide means of washing for the men when they come up from the pit, and of changing their clothes and leaving their working clothes at the pit-head ?—I think it would be an excellent arrangement if it could be carried out.

21144. I suppose you have heard from description of the arrangements that are made in foreign countries ?—I have seen them there. I have seen them in Belgium, where they have baths. I think it is an excellent arrangement.

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21145. Do you think there is any great feeling among miners in Scotland in favour of that, or has it been considered?—I do not say that I could form an opinion as to the feeling existing in regard to the matter at all. My belief is that if this were introduced, by-and-by the men would get so educated, that the men would like to go through it the same as elsewhere. You cannot get any new thing introduced right off the reel, so to speak, enthusiastically, but if it was introduced, I think before many years it would be largely accepted as being a good thing by the men.

21146. Have you any idea what the wives of the men think on the subject? I think they must be troubled by their husbands coming home and making a mess?—I have not consulted the wives, but if I had, I am certain they would be of one opinion.

21147. (*Mr. Ratcliffe Ellis.*) It is a question of whether it is better to have a bath at home or at the mine?—I would prefer them to have it at the mine—that is my personal view and keep the home as clean as possible.

21148. (*Dr. Haldane.*) It must make an awful mess, men coming home in their working clothes?—At one of our collieries we erected baths in the colliery village, which have been taken advantage of, not largely, but it is a training ground for that sort of thing.

21149. Are they plunge baths?—No, shower baths and ordinary hot water baths.

21150. The shower baths are the quickest and the cheapest and the most effectual, I think. With regard to certificates for engine-men, which I think you are rather in favour of, do engine-drivers on railways undergo any examination?—I am not aware of how they are dealt with. I know they undergo tests for their eyesight.

21151. I do not think there is an examination, but I am not sure?—I do not know of any.

21152. That is an equally responsible position?

(*Mr. Ratcliffe Ellis.*) I think there is an examination by the company.

21153. (*Dr. Haldane.*) I was wondering if the companies have an examination. I know they have for signalmen?—These eye-tests are very important for both engine-men and signalmen.

21154. (*Mr. Ratcliffe Ellis.*) You do not mean an examination by the employer; you mean an examination by the Board of Trade when you speak of an examination?—That is so.

21155. (*Dr. Haldane.*) It comes to the same thing in the end. I want to know, as a matter of fact, do you think they institute some test in the way of examination before allowing them to drive engines?—I do not think they institute the test in the manner we indicate—what we want for engine-men. I do not know of any in fact. I could not venture to give an opinion upon the point.

21156. I think there is some examination held for signalmen on the railways which is in some ways like an engine-man in a colliery?—The company examines them as to their efficiency, and as to their being able to read a code of signals—which is a very elaborate one, too, sometimes.

21157. (*Chairman.*) Looking at your Bill, I do not see under Clause 7 that there is anything to show that you want any different class of assistant inspectors from the class which are now appointed. Do you wish that these assistant inspectors appointed by the Government should have a different examination from the present assistant inspectors—that there should be a sort of third class—or would you be content with having many more assistant inspectors of the same class, and paid the same salary?—My view is, that these men should be drawn from the practical men.

21158. They are, mostly. Most assistant inspectors have been fairly practical men and know something about mines, at all events?—I understand they must have done or they would not be in the position.

21159. You seem to think, without it being necessary to put anything in an Act of Parliament, that it would be a good thing if the Home Secretary, more than he does at present, appointed as assistant inspectors men of practical experience?—That is so.

21160. Would you have more district inspectors than you have at present?—No, I have no idea of changing the district inspectorate. We want a larger staff.

21161. Instead of having two assistant inspectors, as all of them have now—and one or two have three—you think that every chief inspector should have four of five or even six assistants?—That is so.

21162. In that case, I am afraid the promotion would be much slower. You would still promote your assistant inspectors to district inspector, and as there are so many more men waiting to be inspectors, they would not get made inspectors so early?—That is, district inspector?

21163. Yes. If you had an enormous addition, or a very large addition, three times as many assistant inspectors, the assistant inspectors would have less chance of becoming inspectors at a reasonably early stage. There would be a block in the promotion?—That undoubtedly would be so.

21164. That would have to be got over somehow, I suppose. With regard to the other kind of inspectors—these itinerant inspectors, as Mr. Ellis has called them—they should be appointed by the workmen. You consider it would be best to have a certain number of men more or less permanently employed, and that these examiners should not be constantly changed, sometimes one set of men and sometimes another set, but you think it would be as well that the same men should be appointed to be examiners very much as the assistant inspectors, and should be examiners all their lives?—I do not suggest that.

21165. On page 8 of the Bill: "Workmen employed in any mine may from time to time appoint any persons who are or have been practical working miners to be examiners of the mine in their behalf. Such examiners may at any time examine." I want to find out whether you are of opinion that it would be a good thing that these examiners should be, so to speak, permanent in some way as the assistant inspectors, or men appointed from time to time as they now are?—I do not suggest that they should be permanent.

21166. They should have power from time to time to appoint persons for a particular job?—For a particular district.

21167. For how long should they be appointed? What I had in my mind was this, that we could appoint, say, two men to cover the whole area of Fife, and after that was finished——

21168. Their duties would be terminated?—The appointment would be over.

21169. When they have gone through a district the appointment is over, and they might or might not be re-appointed. As to that you have no opinion, and that should be as the men choose?—Yes, that is so.

21170. You say, for the safety of the mine, no more than one unskilled man should be allowed to work with a skilled man at the face. Your Bill goes a great deal further than that, because it would not allow any unskilled man to work at the face at all. If you have a law to enact that only one unskilled man should work under a skilled man at the face, do you think it would be necessary for a man to have three years' experience on the roadway before he should be taught to become a hewer by an experienced man?—That is more stringent than my proposal.

21171. You would be satisfied with your proposal that no skilled man should be allowed to teach more than one unskilled man at a time. He should be allowed to teach anybody he liked?—That is so. This Bill indicates that they have to have some experience before they go to the face.

21172. Three years on the roadway?—What I have in my mind is to prevent young men going into a mine and going straight to the face at 20 years of age, for example. They should at least have two years under a skilled workman.

21173. Under a skilled workman at the face or anywhere?—At the face.

21174. I understand, under your Bill, that you would not allow any man, even one single man working under another single skilled man, to go to the face at all until he has been in the mine three years. I want to know whether you think that is desirable. Supposing you have a law to enact that a skilled man should take one unskilled man to teach him his business at the face, is there any reason why, if he thinks the man is strong and capable of making a good hewer, that he should not take him to the face at once under proper precautions—say his own son?—I do not see any reason if he is under proper supervision.

21175. You would be inclined to think, if precautions of another nature were taken, Sub-clause 17 of Clause 11 might be unnecessary?—It probably might fit into certain districts where they must, in the ordinary training, be engaged in the roadway to begin with.

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21176. As a general rule a man would be engaged on the roadway ?—Yes, as a drawer.

(*Mr. Ratcliffe Ellis.*) It would be considerably limiting the available labour in mines.

21177. (*Chairman.*) There are two things you have been asked no questions about which you mention in your statement. First about safety lamps : is it the custom, as I am told it is in Wales, that the hewer gets more if he works with safety lamps than naked lights ?—I am informed so.

21178. Therefore the men themselves would have no objection. It is not so pleasant working with a safety lamp, but at the same time, if they get the equivalent in wages, they probably would raise no objection ?—I have never had any objection raised by the men at all.

21179. You say that safety lamps should be introduced into all mines where the Government inspectors think that there is the slightest danger of explosion. You would leave it in the hands of the Government inspector without any appeal on behalf of the manager to the Home Secretary? —I think such a serious matter as the danger of explosion should be left to the Government official.

21180. That is not in your Bill. About obtaining a fresh enquiry, you make rather a drastic recommendation on the last page of your statement. You say: "Where, however, a serious accident has occurred, and where there may be doubt as to the searching character of the enquiry, it should be open to those interested to claim and obtain a fresh enquiry." What do you mean as to the searching character of the enquiry. Do you mean at the inquest ?—Yes, that is the public enquiry, the Fatal Accidents Enquiry in Scotland.

21181. Where there has been a fatal accident anybody who feels that there is any doubt as to whether all the circumstances have come out, and who is an interested party, might obtain a fresh enquiry. What do you mean ? Do you think one person interested ought to claim, as of right, a fresh enquiry ?—I should think in the matter of fatal accidents the representatives of the deceased should be the parties most immediately interested in making a claim of this kind.

21182. In your Bill application in writing must be signed by six workmen requesting the Secretary of State to make an investigation. Do you think six workmen ought to be the proper tribunal to decide ?—The men employed in the mine where the accident has occurred, I think, are interested partly, as well as the representatives of the deceased, and they ought to have a right to interfere in matters of this kind.

21183. Supposing there are a large number of persons working in that particular pit, 1,000 people, for instance, or something of that sort, do you think it ought to be sufficient if six said there ought to be an enquiry ?—I think it ought to be representative. That is quite enough to burden a document with, six men, if representative in their character.

21184. Supposing the other workmen in the mine were to express themselves as satisfied with the results of the enquiry, would you allow a counter-petition to the Secretary of State ?—We could not help that.

21185. They might, of course, petition if they like. Under this Bill that petition would have no effect, because the Secretary of State would be bound to act if six men asked for an enquiry. It would be a serious thing to have an enquiry if it was not necessary, because men would have to go as witnesses, which would be a nuisance, especially if the great majority of men were satisfied ?—I presume this clause is purely to protect the men where an enquiry has taken place, and a source of danger is still continuing, and at that enquiry the facts have not been elicited so fully as to bring out that source of danger and bring about its being done away with.

21186. I was suggesting whether it was not rather a considerable power to put in the hands of six men, to compel the Secretary of State to have an enquiry over again into all the circumstances of the accident ?—It is undoubtedly a big power.

21187. (*Mr. Ratcliffe Ellis.*) Supposing the Coroner's Jury censured a manager, would you allow him to have a further enquiry ?—There would be no objection if he felt aggrieved.

21188. If he was committed for manslaughter he would have a Court of Appeal ?

21189. We should have a Criminal Court of Appeal established. In Mr. Ronaldson's evidence with reference to lamps he is asked at *Q.* 5,089 : "Do you try to persuade the owners and the men to use safety lamps ?—Do you try and combat the prejudice of the men against safety lamps ?—(*A.*) There is a prejudice. (*Q.*) Do you try to combat it and talk to the men about it, and try to get them in a more reasonable frame of mind with regard to safety lamps ? (*A.*) I cannot say that I talk very much to the men about it, but I know it is a fact that they do object to them. As a rule if safety lamps are introduced the men expect 2d. per ton more on their coal, and the owners naturally object to it, although I must say that where safety lamps are introduced they put out as much coal with the safety lamps as with the naked lights." Do you agree with that ?—As to the men having a prejudice against it ?

21190. He says they have a prejudice and require 2d. a ton more although they put out just as much coal with safety lamps as without them ?—As to that I cannot form an opinion, as to whether they do it or not. We have in our district something like 1,000 lamps in use, but we have never had any difficulty about deduction from the extra price paid for the extra work, or anything of that kind.

21191. The extra price has been paid when it has been asked for ?—I understand it is always paid, and it has been paid.

21192. (*Mr. Smillie.*) With regard to the increased number of inspectors, I suppose you have in your mind quite a number of collieries in your own district which you feel do not require the same inspection as other collieries ? —That is perfectly true.

21193. Colliery inspection and mining legislation generally have been made necessary because of carelessness and indifference in some cases, and not from universal carelessness or indifference ?—It would be a pity if it had been universal carelessness.

21194. I mean some mines might require to be inspected four or five times a year, while others would not require to be inspected at all, because of their nature and the management thereof ?—That is true. If the manager is negligent and does not carry out the regulations of the Coal Mines Regulation Act, and there are complaints made against him, inspection would have to be frequent, and would be frequent.

21195. The miners and you do not propose that periodical inspections, half-yearly or yearly, must be made whether or not there is any occasion for them to be made ?—No.

21196. We might take it a large number of mines would not necessarily be inspected more, merely because you increase the number of inspectors ?—Not necessarily.

21197. If you had more inspectors it would make sure that an additional number of surprise visits would be made to the collieries ?—Undoubtedly that would be so, because you would have a greater staff of men to make them, and if these additional inspectors were making surprise visits there would be less need for inspections under Rule 38.

21198. Do you think that one inspection by the Government mines inspector is of far more importance than two or three inspections by the workmen's representatives ? —I think it has a greater effect.

21199. You frankly think increased mines inspection by Government inspectors would lead to greater safety ?— I do.

21200. (*Mr. F. L. Davis.*) In answer to Mr. Smillie you said some mines would not need to be examined as often as others. Is not that so ?—That is so, well-conducted mines.

21201. Why not ?—Because well-conducted mines are not so much in need of being looked after as mines which are not well-conducted.

21202. Under the present system of inspection we get it that an inspector can only examine on an average each mine once in a year. Therefore the sample of inspection of these good mines must have satisfied him everything was all right ?—Some inspectors are easily satisfied.

21203. You yourself say that some mines would not require to be examined ?—That is so. Some mines require more attention, so far as inspection is concerned, than others. I am going back now probably about 17 or 18 years ; there was one mine that we discovered that was very bad, and I gave instructions to have that examined by the men. The management pleaded with us to allow that to stay over a fortnight until they put the mine right. They did so, and we found after the examination was made that mine was in good order. I say this mine ought to

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have been inspected by the Government inspector and not by the men.

21204. The present inspectors act upon that principle ?—If we make a complaint they will.

21205. They know themselves the mines that require more inspection or more frequent inspection than others ?—Yes.

21206. And they visit them more frequently for that reason ?—I do not know whether they do or not. I could not say as to that ; I could not tell.

Mr. DAVID GILMOUR, called and examined.

21207. (*Mr. Smillie.*) You are at present the Secretary and Agent of the Lanarkshire Miners' Association ?—Yes.

21208. Previous to your appointment to that position you were working underground ?—I was.

21209. And consequently you have a knowledge of underground mining ?—I have.

21210. Has your experience led you to think that the number of inspectors for mines is not sufficient at the present time ?—It is totally inadequate for systematic inspection.

21211. You are anxious that there should be an increased number of inspectors appointed, and that they should be, so far as possible, drawn from the ranks of practical men ?—Yes.

21212. Is that the general opinion of Scottish miners, so far as you know ?—The universal opinion, so far as I know.

21213. Is there any regular or systematic inspection of mines at the present time ?—There is not that I know of, apart from the ordinary morning inspection, and the ordinary inspection carried out by the fireman.

21214. Is there any regular or systematic inspection attempted by the Government inspectors at the present time ?—None.

21215. If there is anything called to their attention in reference to carrying out the Act, they attend to it ?—Yes.

21216. And in the case of a fatal accident, or explosion, they examine the part of the mine in which that has taken place ?—Yes, and a considerable amount of time is taken up in attending to that, and giving evidence before the court in such a case.

21217. So that you feel that the inspection by the present staff of Government inspectors is not satisfactory ?—It is not.

21218. And you are favourable to the appointment of an additional number of inspectors, and that they should be drawn from the ranks of practical working miners ?—Yes, and I think if that were done the number of accidents would be reduced.

21219. You are conversant with General Rule 38, which gives the miners the right to appoint inspectors from their own ranks to inspect the workings ?—Yes.

21220. In connection with that, you say that they should have the right to appoint persons who are or have been practical working miners ?—Yes, and my reason for that is this : that if the workmen in the colliery appoint two of their number to make a local inspection, those men are dependent upon the colliery company as a rule, and if they discover danger and put it into the report book, it carries with it the fear that they might lose their employment by-and-by, and that influences the men to a great extent in carrying out the local inspections. The same thing applies to local inspectors who may be drawn from some other pit. The feeling the men have is that if those inspectors, drawn from some other pit, make it too difficult for the manager of the colliery company, then information can be sent to interfere with their employment ; and as there are so many things in respect of which a miner can be interfered with, whilst it is a comparatively good thing as matters stand at present, I say it is very far short of carrying out the work which we believe to be necessary.

21221. I suppose, if persons who had been appointed as inspectors and made an examination were dismissed because of an adverse report, action would be taken at once by the trades union to protect them ?—Just so ; but the difficulty is that men can be dismissed sometimes on frivolous grounds which a trades union cannot get at ; there are so many ways of getting at a workman in connection with a coal mine that it is impossible almost to protect him.

21222. Persons might be unfairly dealt with up to the point of leaving the employment without any direct dismissal, and it would not be easy to protect them in a case of that kind ?—That is so.

21223. And there is a fear of that kind at the present time ?—Undoubtedly.

21224. The Lanarkshire miners some time ago decided to pay for the inspectors' loss of time and wages. Has that been taken advantage of largely?—Not universally, but it has been taken advantage of to a greater extent than any previous movement of that kind, I think, in Scotland.

21225. Have you had reports sent to you from those inspectors ?—We have. I may say it is a condition of our scheme in Lanarkshire that they must send reports of every inspection which is made, so that we have the reports of every inspection made in the county by local inspectors.

21226. You are aware that where any fault is found with the condition of the mine, that the colliery manager must send that report on to the mines inspector ?—In the first place the local inspector must put that report in the report book at the colliery ; and if there is any report of danger in that, then the onus falls on the colliery manager to send on the report to the mines inspector. I have found, in several cases, that has not been done. Only the other day I had to call the attention of the mines inspector to one report in which danger had been reported, and he replied to say he would attend to the matter, which was quite as much as to say he had not heard of it before. One would assume, therefore, it was in the books, but it had not reached the inspector apparently.

21227. May we take it that during the past six months you have had sent on to you the reports of pit inspectors, in which in six or eight cases there has been fault found with the condition of the mine, or some part of the mine ?—Yes, at least that number.

21228. Principally as to ventilation ?—Ventilation complaints are very frequent.

21229. And dangerous stones in the main roadways ?—In the case I referred to a moment ago the complaint was twofold : first, with regard to a dangerous stone insufficiently propped, and secondly, that the ventilation was insufficient in three or four sections. That is my memory.

21230. Has that been attended to at the present time ?—I had a reply saying it would be attended to at once, and since that I have had no further report. That was nearly four weeks after the inspection had been made.

21231. You think that generally this inspection does good ?—Yes.

21232. And the scope of it should be extended by enabling the miners to appoint persons who are or have been practical working miners ?—I do.

21233. That would give an opportunity to the men in the district of appointing two persons who could examine ?—Men should be got who would not be dependent upon the coal owners in the district for their labour.

21234. Then as to the inspection by the firemen, the miners assume that the colliery fireman holds a very important position ?—They do.

21235. I think your district is in what is known as a fiery zone, where the collieries are wrought with closed lamps ?—Yes.

21236. The position of a fireman there is a very important one in view of the fact that there may be accumulations of gas from time to time ?—That is so.

21237. Have you any idea as to whether or not the greatest care is taken in the selection of the men to fill that post ? Is the best man always selected, so far as your opinion goes ?—Generally I believe the best men are selected ; but there are cases in which that does not apply. My attention has been drawn to the case of men having been appointed as firemen who had none or very little previous knowledge of mining at all in the Hamilton district ; but I should say that generally the employers employ men that are able to do the work.

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Mr. D. Gilmour.

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21238. Generally speaking, the firemen are competent, skilled, experienced persons ?—That is so.

21239. But there is nothing at the present time to prevent the manager appointing persons who are not competent ?—Nothing at all.

21240. With the exception of this, that the Act says " a competent person appointed by the manager " ?—Quite so.

21241. Do you favour the examination of firemen for a certificate ?—I think it is only a sensible reform which there can be nothing at all against.

21242. Have you any idea as to the extent of the district to which firemen are appointed and upon which they have to report ?—Generally, I should put it that a fireman has more to do in his morning inspection particularly than he is able to do thoroughly. For instance, he may go down the colliery at four o'clock in the morning, two hours before the miners have to descend ; he must have his inspection completed, and very often he has a very wide section to inspect. In many instances it is absolutely impossible that he can perform his work in a proper manner. The afternoon inspection is different, because he is on duty all day, and he can make his own time for that inspection. For the morning inspection I do not think he is able to carry it out properly, as things stand at present, in many instances.

21243. Do you remember what his duties are under the Act for his morning inspection ?—To examine the whole of the roadways in the workings particularly referring to gas, to certify that the places are free, that the travelling roads are free within his section, and as a matter of fact everything—both the timbering and the general safety of the workings it is his business to certify before he allows the miner to go to his working place.

21244. So far as you know it is not possible for him to make the statutory inspection under the act in the time at his disposal ?—I do not think in the morning it is possible, in a great many instances.

21245. Are the firemen's duties in Lanarkshire generally confined to ventilation and looking after the men at the face ?—No ; that is the exception. The fireman's time is taken up very largely in doing other work. There are some cases in which the firemen do nothing but look after the ventilation, but that is the exception I should say. The rule is that the firemen would do other work in the course of their ordinary occupation.

21246. What class of work ?—Timbering, for instance, and any odd jobs that may be necessary in the case of mining.

21247. Have they anything to do with the supervision of the pony drivers ?—Yes, they are put as overseers, as it were, over the drivers to see that the men get what we call " cleek," and that the tubs are kept going gradually.

21248. Are they held responsible for the output of some of their sections ?—In some cases they are, but I would not put it that they usually are.

21249. That interferes with their duties in looking after the safety of the workmen at the face ?—Yes.

21250. (*Dr. Haldane.*) Do you mean that the firemen themselves are really supposed to do timbering sometimes ? —Yes.

21251. Not merely to supervise it ?—To do it themselves.

21252. (*Mr. Ratcliffe Ellis.*) In the face or in the roads ? —Anywhere—to do any odd work that may be necessary in the mine.

21253. (*Mr. Smillie.*) Is it in the face or the roadways ? —Not at the working face, in the roadways, what we call on-cost labour.

21254. I suppose there is a considerable amount of mechanical haulage in your district ?—Yes.

21255. There have been a number of accidents arising from breakage of couplings and haulage ropes all over the county ?—Yes ; not very frequently. There have been a number, but they are not very numerous.

21256. It has been suggested that in the case where trains and tubs are carried along by mechanical haulage there might be a continuous chain, or some method by which there should be something over the top of the hutches, or along the bottom, to prevent their running back in the case of anything breaking. Do you think that that should be compulsory ?—Certainly ; I think that should be compulsory.

21257. Do you favour some method of either blocks or runaway points, or a slip rail in order to derail the hutches in the event of a rope breaking on the haulage road ?—Yes, I think ordinary precautions of that kind should be taken ; but of course the haulage varies so much, according to the seams in the different pits, that I think it is a matter for engineering experts to go carefully into and draw up rules that should be compulsory.

21258. Now let us deal with the question of unskilled labour in mines. I think in Lanarkshire there is the largest proportion of unskilled foreign miners that there is in any part of Scotland : almost the whole of the foreign mining population live in Lanarkshire ?—Yes.

21259. Have you any idea of the number ?—About three years ago we sent out for returns from our own local officials, and they had great difficulty in getting accurate materials ; but at that time we had in Lanarkshire considerably over 2,000 men, foreigners, and they were mostly all Polish miners.

21260. Out of what number ?—Out of 32,000 employed underground.

21261. Have they had any experience of mining before coming to Scotland ?—I think it is generally admitted they have not. They come from agricultural districts in Russia and Poland, and some of them have not seen coal pit before, and do not know anything about it. I may say they are brought over here by relatives, and one man may bring four or five over for the purpose of making a profit from them. Certainly the great majority have no previous knowledge of coal mining at all before they come into Lanarkshire.

21262. Many of them select remarkably Scotch or Irish names, do they not ?—They nearly all select a Scotch name immediately after they start work. As a matter of fact at a pit at which I was checkweigher some of the miners, for a joke I believe, called one of the newcomers, when he was asked to give a name, by my name, so that he took my name, after his first shift. It is quite a regular thing for them to take up some ordinary workman's name.

21263. I take it from you that the name they select is the name put into the colliery office book ?—Yes.

21264. That is, a person bearing a most unpronounceable name to us, may, on the first day he goes down a pit, secure a very plain name when he comes to the pit bank ?—Yes.

21265. And that name may go into the office ?—In almost every case that is so.

21266. And the manager of the colliery would not know that that person is a Pole ?—Unless by conversation. The manager of the colliery must have a record from the fireman or overman ; but by the names in the books it would be impossible to tell.

21267. Can you suggest a method by which a manager could have a conversation with them of some sort ?—There is no method, because not understanding their language he cannot converse with them.

21268. What I want to point out is really this : that accidents may occur, and do as a matter of fact occur, to foreign workmen, and it is impossible to find out the proportion that occur to foreign workmen, as compared with others, because of the fact that they take local names ?—That is so.

21269. Do you know whether or not it is true that the manager and the overman in many of our collieries in Lanarkshire are not aware of the changes which take place between those foreigners, that some may leave and others come and the manager knows nothing at all about it ?—Only about a fortnight ago a manager himself made that statement to me. He said " It is nearly impossible to prevent them ; they are in the habit of having strange men with them, and unless the attention of the overman is called to them, they may be working a good few days before it is detected." It is admitted they get into the pit without the cognisance of the overman, and that is a breach of the Mines Act.

21270. Is it possible for a workman who has been there some years to employ three or four, or even as many as 12, under his supervision ?—That is generally so at first, and it is continued until the newcomer learns a little of the language, and when he begins to understand the condition of affairs, then he blossoms out into a contractor himself and does the same thing. These men have been getting a low wage in their own country, and they are content to work for as little as 2s. a day for a fellow countryman, and they still continue that until they find out that they are being exploited.

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21271. Do you know the Bothwell Park Colliery which belongs to William Baird and Company ?—Yes.

21272. Is the general manager Mr. Forgie ?—Yes.

21273. Have you any idea what proportion of foreign workmen are employed at that colliery ?—In the course of my work I have met these men a good many times, and the system of carrying on the work is generally to have a short meeting in the morning so as to get the men as close to the pit as possible and then speak to the whole number of them. They arrange themselves on two sides, the British worker and the foreigner, and without any exaggeration I should say that three-fourths of the men were Polish miners. They were reduced last year, but at the present time my information is from the check-weigher that more than 50 per cent. of the men employed getting coal at the coal face are Polish miners.

21274. Do you think that the employment of those men in the Scottish mines leads to greater danger ?—Undoubtedly, especially in fiery mines.

21275. I suppose there would be difficulty in preventing that ?—Very great difficulty. We have had statements made to our executive committee in connection with one case, which I have no reason to doubt, that two Polish miners working in one place were made to understand that they could not go into their place that morning because it was dangerous, and they took them into a different place and left them there. They found the coal there more difficult to get, and in the course of an hour or two they left that place and went back to their own original place—the dangerous place—and the fireman discovered them there and put them out, and he had to do that three times in the course of one shift. Our information was from the fireman. He reported the matter, according to his statement, to the manager, but nothing was done, and it simply ended with that. Of course, if that had been made public property, in the way of getting into Court, the fireman would have been at the mercy of the employer, and might have lost his situation. I have no reason to doubt the truth of the statement.

21276. There have been cases in the Law Courts from time to time in which foreign workmen have been involved. There was one about a fortnight ago decided in the Court of Session here in Edinburgh in which the compensation had been refused in the case of a fatal accident to an overman at the Glenboig fireclay pits. The insurance company refused compensation on the ground that he had allowed a Polish miner to go into a place in which there was gas, and the result was an explosion was caused, and the overman lost his life. The judges held that he could not protect himself so long as the employers allowed that sort of thing, so that they overruled the objection and gave compensation to the widow on that ground.

21277. You are opposed to the employment of unskilled foreign workmen in the mines who do not understand the language ?—Yes.

21278. Not on the ground of any objection to the men themselves, but they do not understand the language and they are a source of danger to the other men underground ?—Yes, that is so.

21279. Now, on the question of drawing up Special Rules: do you know whether or not the Lanarkshire miners, or their representatives, have at any time been consulted in the drawing up of Special Rules ?—They have not.

21280. Do you think that they should be consulted with respect to the drawing up of Special Rules ?—I think so. I think if the miners were consulted they would have greater interest in seeing that they were carried out more strictly. Half the responsibility would be on the miner to see that the rules were carried out. As things stand at present the rules are posted up at the collieries, and a miner has scarcely any time to read them—I should say not one in a hundred would carefully read them—with the result in a great many cases they have been ignorant of the nature of the rules until some accident takes place, when the whole subject of course at that time is threshed out. I think it would be more satisfactory if in drawing up timbering rules the workmen were consulted.

21281. Or in reference to any other Special Rules ?—Yes, in reference to any Special Rules.

21282. You think if they were consulted through their representatives there would be in all probability more care taken in carrying out rules which were mutually agreed upon, if there can be mutual agreement upon rules ?—I think there would be.

21283. The latest timbering rules which have been adopted have not led to any great diminution in accidents ?—No. I do not think that the rules have been very strictly carried out. In some cases it is very difficult to strictly carry them out to the letter, and I must admit that that is through causes over which the workman has not sufficient control. There is not sufficient care exercised to see that they are carried out strictly.

21284. Is there not a feeling amongst the workmen in Lanarkshire that some of the special timbering rules, if carried out, would render it almost impossible to carry on mining there ?—That is so.

21285. And to some extent they are a dead letter ?—They are not observed, and the employers know in many instances that they are not, and they never try to enforce them.

21286. Now I will ask you about the duties of the winding enginemen. I suppose as mines are extending there is greater responsibility on the services of the winding engineman ?—That is so.

21287. Do you favour a winding engineman holding a certificate of competency ?—I think it is very necessary.

21288. You are aware that under the Act the manager is supposed to appoint a competent person ?—That is so.

21289. Do you know whether or not he makes any test of the ability of the person whom he appoints, or does he usually take it for granted that the person appointed is a competent person ?—Generally, of course, the men appointed are competent—they could not do the work unless they were—but there are cases in which men have been appointed to fill a gap, as it were, who were not competent. For instance, officials about a colliery who have a slight smattering of knowledge about engine-winding have been appointed to take the place of a man who has had a dispute.

21290. You agree with practically everybody that the colliery engine-winders of Great Britain are an exceptionally fine class of men ?—Yes.

21291. And no fault can be found with the vast majority of them ?—None whatever.

21292. Have you ever known of what is called the "tramp" engineman ?—Yes.

21293. Is he a pretty common person in Scotland ?—We had a case in the upper end of the Larkhall district some time ago, in which two or three of the enginemen were affected, and the management got such a man to take the place, and the men refused to work. We had no responsibility and we did not support them, because we had not anything to do with it, but the miners, being in fear through being in the hands of an unskilled man, refused to work.

21294. A manager being in that position might not be too careful in his selection of what he would feel to be a competent person ?—Naturally he is anxious to get coal, and he risks something.

21295. Of course a certificate would not always carry with it a guarantee that the man was the best possible man, but it would prove that he had passed an examination ?—Yes. I think the holding of a certificate should be compulsory.

21296. At some collieries there might be 30, 40, 50 or 100 men in the shaft at the same time, and their lives might depend upon the competency of the engine-driver ?—Yes. In very many instances the duties of the engine-winder require him to be a practical, steady, temperate man. He is standing there almost like a machine for 8 or 10 hours at a stretch, especially at large collieries where the output is great.

21297. I suppose some of the members of your Association, and the men in your county, are sometimes guilty of a breach of the Mines Act ?—Yes.

21298. And they are charged before the court with it ?—They are.

21299. You have no system of fining for breaches of Special Rules or breaches of the Mines Act ?—There is no system of fining, although I have heard it said that the managers, in order to have their ideas of discipline carried out, instead of raising a prosecution, have taken the workman into the colliery office and asked him to agree to pay a fine, which fine, of course, is paid over to some charitable institution, rather than go into court.

21300. Is that for a breach of the Mines Act or some slight breach which might have been a danger to his own life ?—Something like that. For any serious breach, generally speaking, I think the employers would raise a prosecution.

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Mr. D. Gilmour.

11 June 1907

21301. Has your Miners' Association, so far as you know, ever defended workmen who were charged with a breach of the Mines Act?—We have not.

21302. As a matter of fact, is it true that you have decided not to defend any workman in such a case?—That is so. The Executive Committee—it does not matter what the charge is—have always refused to take up any such case. We have had a good many appeals to us to do so. For instance, the workman has come to us and said the charge was very unfair, or it was through spite or malice, and argued from that standpoint and asked us to defend him, but we have refused. We have simply resolved that where a workman is charged with a breach of the Mines Act we do not defend him in any way.

21303. Of course, if it was perfectly clear that a conspiracy was on foot against a person, and you had good grounds for thinking he was not guilty, and he was a member of your union, you might undertake to assist him in a case of that kind?—We might, of course, but we have never been called upon to do that. In the cases that have been reported to us there is just the word of the workman as against the manager at the colliery.

21304. You do not encourage breaches of the Mines Act?—We do not.

21305. And you would not spend the union's money in defending them if they were guilty of a breach?—Quite so; we believe it is as much our duty as it is the duty of the manager at the colliery to insist on the Act being properly carried out.

21306. (*Sir Lindsay Wood.*) I think you said one reason for not carrying out Rule 38 was for fear of offending the management?—Yes.

21307. Have you any particular case of that?—I said that it was a most difficult thing to get proof of that kind, but the workman, knowing in mining how easy it is to punish him, is afraid to do that work thoroughly. As a punishment he may be put into a place where the coals are hard to get, and he may not be able to earn near the standard wage. That is a form of punishment which it is very difficult to get at.

21308. Do they not draw lots for their places?—There is nothing of that kind in Scotland. It is a case of individual bargaining in circumstances such as I have mentioned.

21309. You do not know any case in which the men who have made the examination have been punished?—I do not say that we could prove any case of that kind.

21310. You have a suspicion that there might be something of that kind?—Yes, there is the fear of the workmen. The workmen generally are afraid to make a very damaging report against the manager at the colliery if they make an inspection. As a matter of fact I had a case reported to me in which two of the workmen appointed to inspect the North Motherwell Colliery belonging to Messrs. Merry and Cunningham sent a report to the office in which they said there had been bad ventilation in several places, and that it was dangerous pretty generally. I drew the attention of the mines inspector to that point and had the reply that we had a different report sent to us from what was put in the colliery book. I investigated that, and found that the colliery book had been entered up as being all right and safe. That was a case in point in which they sent on the statement through ignorance, I suppose, that it was their duty to send a copy of the statement they put in the colliery books. That is a case in which a different report was sent to us.

21311. It might be the other way, that a different report was sent to you to please your side?—I think the workmen would know as a matter of fact. We are always better pleased to get reports showing that there is no danger.

21312. Is not the owner pleased if the men go round the pit and he gets a report that everything is safe?—That is so; if a report is put in the report book showing that the pit is generally unsafe, the manager is held to some extent to blame for that.

21313. The management would be only too glad to know, if that was so, because it would reflect on the officials under the general manager?—I frankly admit that the majority of the managers do not put any hindrance in the way of the men carrying out their duty properly. We are not able to prove anything except the general feeling that the men are afraid on account of the chance of getting at them with their daily labour. They are afraid to put in a damaging report in the book.

21314. You said that the reports were not sometimes sent to the inspectors?—I instanced a case in point.

21315. That was only supposition?—The mines inspector in his reply to me admits that, because the inspection was made three or four weeks ago, and when I sent on a copy of the report he writes back and says the matter would be attended to, clearly proving that it had not been up to the present time.

21316. That does not say the report had not been sent. It does not show a breach of the Act by the owner?—My experience of the Government inspectors is this: when their attention is called to danger in a mine it is attended to at once. I do not know of a case in which that has not been done.

21317. There were no steps taken with the management for not having sent that report on?—None yet; there may be later on.

21318. It only occurred just lately?—Yes, within the last fortnight. I have the reply from the mines inspector.

21319. Generally speaking, do you think that the firemen are competent men?—Generally speaking, they are.

21320. There might be improvement if they had less work to do, other than the inspection of a mine?—I think they would be able to do the work better if not overloaded with other things.

21321. Do you think that the number of the Government inspectors ought to be increased?—I certainly do.

21322. Would you have the districts under the head inspector increased?—No, I think that the district inspectors have too much to do already.

21323. You would increase the districts, and instead of one have at least a number under them?—I think so.

21324. That would tend to safety in the smaller districts?—I think that would tend to safety.

21325. Instead of having a large number of assistant inspectors?—Both things. I think it is an absolute necessity to have a considerable number of assistant inspectors for the work to be properly carried out.

21326. The last witness told us he thought that there ought to be one inspector for every 10,000 men employed in and about the mine?—I think that would be sufficient work for an inspector to do.

21327. One inspector?—One inspector to inspect mines in which 10,000 men are at work. Do you mean without assistants?

21328. I am referring to Clause 7 of your Bill?—I think that one inspector who is responsible for looking after 10,000 workmen has too much work. I do not think that the inspection can be properly carried out to cover such a large number of men, more especially in the pits in Lanarkshire, because there are a very large number employed as a rule in each pit.

21329. How do the Polish men come over so much to Lanarkshire?—I do not know. They are located there to begin with, and then they send for relatives and tell them what an Eldorado this country is. They get them to work for low wages and make a profit on them, and so they go on increasing.

21330. They were not brought over for any special purpose?—Not in coal mining.

21331. (*Mr. Ratcliffe Ellis.*) Were they not brought over in connection with another industry?—Yes, with Furnaces. So far as disputes in coal mining are concerned, they have not been brought over.

21332. (*Sir Lindsay Wood.*) The management did not know that Polish men were employed?—They admit that.

21333. How were the men employed?—As a rule the manager of the colliery does not interfere in the matter of employing the workmen He leaves it entirely to his overman, the under-manager. He employs and dismisses all the men. The manager does not interfere in the work.

21334. The under-manager knows?—Yes.

21335. (*Mr. Smillie.*) Do contractors employ workmen without the knowledge of the manager sometimes. Could he not employ the men?—Yes, but as a rule coal contractors do not employ Polish miners.

21336. A Polish coal contractor?—The Polish contractor I refer to is not a contractor who is recognised by the colliery company, he is only a man who may get the material put into his name and pays the workmen anything he likes. The company do not know about that; they do not let out a contract to a Polish miner. I do not know a case in our county.

21337. (*Sir Lindsay Wood.*) How does the man get the money for the Polish miner? Do they not draw their own

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wages ?—It is the custom in Lanarkshire, where there are four men working together in one place, double-shifting, that all the four men's material goes into one man's name, and they divide the money.

21338. They are contractors ?—That is not contract really. Instead of having each individual miner's name on the paybook, they may have one name for four workmen. That is left to the men's own free will.

21339. Instead of dividing the money amongst the four, one man gets over so much less ?—That applies in the case of the Polish miner who comes to learn the language. When his countryman first comes who is used to 1s. a day, he thinks he is getting on all right if he gets 2s. If he earns on an average 6s. and pays 2s. to the workman he benefits 4s. from the man employed. The colliery company do not experience any benefit from that. It is not to their benefit to allow that to go on.

21340. He must know it, I should think. It is rather a curious system ?—He takes it that it is not his business, and he does not interfere.

21341. You said that winding enginemen ought to have certificates ?—I think so.

21342. What certificates would you give them ?—A certificate of competency. They ought to be passed by some expert as being qualified men.

21343. You mean for someone to give a character ?—No, to test them as to their ability to work winding engines before they get a certificate of competency.

21344. You mean a practical test ?—Yes.

21345. Winding so many tubs a second or so many men a minute ?—I should not say that was desirable.

21346. I do not know how you can get a certificate. You can only get the opinion of a man who can give characters. You can only get a man to say, "I believe this man is competent." I do not know what examination he could pass ?—I think it would not be an impossibility for the Government to carry out a system of examination to give men qualifying certificates.

21347. The Government would want to know what examination he has to pass ?—An examination as to his knowledge of the engine, to begin with, and his ability to do the work.

21348. Freedom from accident during a certain period of time ?—I do not know that that would apply.

21349. That is the difficulty. I do not see how you could do it. I want to know what sort of certificate you suggest. I am told that these men ought to be certificated, but I have not yet found out how they should be examined, or what examination they should pass ?—I could not go into detail as to the method of examination only in a general way, that we are of opinion than an engine-keeper, because of the nature of his work, ought to be certificated as a competent man, and that there should be some means for carrying that out. I believe through the Engine-keepers' Association that practical means can be devised for that, but not being one, and not having the practical knowledge, I could not go into those details.

21350. Under the present system there are very few accidents ?—That is to say, comparatively few.

21351. Then as to having a set of men who are not capable, is that at all due to restriction in the employment of the enginemen ?—No, probably the trades organisation when a dispute is on advise their members not to accept employment.

21352. Restrictions are put on to prevent a man coming into the employment ?—If there is a dispute on at the colliery.

21353. Without that ?—I do nct think the engine-keepers are able to prevent that as a rule. They do try to restrict the number of enginemen to see that the labour is not in excess of the demand. There are a considerable number of men, officials in other capacities, who do get to learn how to wind an engine ; at every colliery there are men who have a smattering of the work.

21354. They put on a certain amount of restriction for that purpose—I mean the enginemen ?—I understand that they do. I am not in touch with their organisation.

21355. I thought you complained that owners had to employ men who were not sufficiently practical ?—I should think there is a sufficient supply of practical men for ordinary purposes except in cases of dispute.

21356. You say that you are of opinion, where the employer is responsible to engage men specially to do the work of timbering and free the working miner as much as possible from this work, that the accident rate would be greatly reduced. Then, you say, "That only men who were duly qualified by certificate of efficiency should be appointed to carry out the duties defined in General Rule 4, and that those men should be responsible only to the Government for the due discharge of their duties." The firemen ought to be responsible only to the Government ?—Yes, those men could be utilised for making a system of daily inspection. We are of opinion, if they were left independent of employers and men, they could carry out their duties in a far more efficient manner.

21357. The Government ought to employ firemen at every colliery to make these inspections ?—That is our solution of the difficulty. That these men ought to be employed by the Government and paid as they are paid now at the expense of the colliery owner.

(*Mr. Ratcliffe Ellis.*) You are not speaking of the same thing. Sir Lindsay Wood is talking of ordinary firemen.

(*Mr. Smillie.*) The Witness is talking about the firemen.

(*Mr. Ratcliffe Ellis.*) You cannot mean that ?

(*Mr. Smillie.*) He does.

(*The Witness.*) I understood you were asking on the question of inspection under General Rule 4.

21358. (*Sir Lindsay Wood.*) I was asking about the firemen ?—We hold that the ordinary fireman should be a Government official. That has been our opinion for a long time.

21359. That would increase the number of inspectors very largely which the Government would have to employ ?—Yes. I think, however, under the Government inspectors that that could be carried out without any difficulty. They could be under the control of the inspector of the district.

21360. Under General Rule 4 of the Act, that means those men who have to examine all the working places before the men go in every morning ?—Yes.

21361. All those men would have to be under Government employment ?—Yes.

21362. That would mean a very large number of men ?—Yes, it would.

21363. Do you think that ought tc be done ?—In our opinion it would tend to safety, at any rate. It might be difficult to carry out, but it would be a very big step towards reducing the number of accidents.

21364. Who would be responsible for any accident occurring from these men ? The managers of the mine would not be responsible ?—They would be liable to punishment if it could be shown——.

21365. The manager of the mine could not be responsible for any man employed by the Government ?—If the Government official did not carry out his duty, I take it, you could in altering the Mines Act insert a provision punishing the fireman, who would then be a Government official.

21366. (*Mr. Ratcliffe Ellis.*) It is in the Mines Act now. Sir Lindsay Wood asks you whether you would relieve the manager from the responsibility of the fireman's negligence ?—Undoubtedly. I do not see how you could hold the manager responsible if the fireman were not under the control of the manager.

21367. Would that be in the Mines Act ?—I think it would. The manager would report any dereliction of duty on the part of the firemen to the inspector.

(*Mr. Ratcliffe Ellis.*) It would take a long time before he could prevent him doing anything of the kind.

21368. (*Sir Lindsay Wood.*) So far as the working of the mine is concerned the responsibility would be on the Home Secretary ?—Yes, on the Government inspector. We recognise this as being a very big question, and it may not be ripe for sclution yet. We have discussed it at our conference pretty frequently.

21369. (*Mr. Ratcliffe Ellis.*) Upon the question of the inspectors, the present provision of Section 39 of the Mines Act provides : "A Secretary of State may from time to time appoint any fit persons to be inspectors (under whatever title he may from time to time fix) of mines and assign them their duties and may award them such salaries as the Treasury may approve, and may remove any such inspector." That would enable the Home Secretary to appoint any number of inspectors he thinks fit ?—That is so.

21370. Have you any fault to find with the calibre of the inspectors now appointed ?—None whatever with the inspectors so far as I know in Scotland.

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Mr. D. Gilmour.

11 June 1907

21371. Do you want to make any legislative alteration in that, or would you be satisfied if the Government appointed more inspectors?—We think that it would be more satisfactory if the assistant inspectors were drawn from the ranks of practical men, men who had gone through all the grades of mining.

21372. Which class down the pit do you suggest that they should be selected from, the men who work at the face or the men who work at the roads or the firemen?—I should think that either of these men would be quite capable.

21373. Do you think a man who has worked at the face and is a thoroughly experienced, practical miner is the best man to appoint to be an inspector?—Yes; I believe there are hundreds of those men who have qualified to be appointed as inspectors.

21374. Would you say that the qualification should be that the miner has worked at the face?—No, that he has had a general practical experience of mining.

21375. For how long?—The time that is specified in the Mines Acts.

21376. Five years?—Yes.

21377. What objection have you to any class of persons who have got that experience being eligible for these appointments?—I should think in going round inspecting the working place that the workmen would be more ready to give all information to a man they knew had practical experience than they would to some of the men appointed as things stand now.

21378. Do you think that any workman would withhold information necessary for safety upon that ground, because he was not one appointed from their class?—Statements have been made that workmen are afraid to report danger to the inspectors. I do not know that it has any foundation, in fact, but there is a general feeling that if a report is given to an inspector it somehow or other reaches the colliery manager.

21379. Do you think there is anything in that which requires serious consideration?—I do not think there is much in that objection. I believe that instances may have occurred.

21380. If a man has had five years' practical experience, which he must have to get a certificate, you would not exclude that man from the position of inspector because he belonged to a particular class?—No, but I should think, in appointing inspectors, that it would be an additional qualification if he had practical experience in general mining.

21381. Do you know any inspector who has worked at the face with whom you have no fault to find?—Yes, one in Scotland has worked at the face.

21382. Who is that?—Mr. Pearson.

21383. Mr. Ronaldson has not worked at the face?—No.

21384. Nor Mr. McLaren?—I think Mr. McLaren, the present chief inspector, has worked at the face.

21385. We should agree, if a man has had thorough practical experience, it does not matter what class he belongs to?—No, that is so.

21386. You do not think that inspection now is sufficient?—I am convinced of that.

21387. Your two inspectors disagree with you in that view. Mr. McLaren was asked a question: "Do you consider you can do justice to your district in the way of inspection—I mean that it is not too large? (A). So far as the coal mines are concerned, I think, probably the inspection is quite sufficient, but it is utterly impossible to do full justice to the quarries. (Q). Then what would be your suggestion with regard to the quarries?—(A). The only thing would be to provide another assistant, if that were possible." There is a later question: "As regards the coal mines, do you consider that the underground inspections that you and your assistants are able to get through are sufficient?—(A). Last year we were able to manage for the first time to see all the mines, and to make underground inspections in all the mines," and that he considers sufficient. Mr. Ronaldson was asked similar questions: (Q). "Do you consider that you and your two assistants are competent to inspect the mines as much as you think it desirable they should be inspected? (A). Yes. (Q). And your inspection is as thorough as you think it is desirable it should be? (A). As thorough as it is desirable that it should be, that is to say, of course people have divided views as to what 'inspection' should be—according to our ideas of Government supervision I think it is quite sufficient." That was the view of the two inspectors, but you do not agree with them?—I do not agree with them.

21388. How often do you suggest that a mine should be inspected?—I should think once a month would not be too much for a general inspection.

21389. There are about 3,000 collieries in the kingdom?—Yes.

21390. It would want a large number of inspectors?—Yes, undoubtedly it would.

21391. A suggestion has been made by your friends that once in six months would be sufficient?—I do not agree with that; I do not think that would be sufficient.

21392. (*Mr. Ratcliffe Ellis*). You do not agree that inspection should be every six months?—No.

21393. Do you agree that the responsibility for the carrying out of the Act should primarily rest upon the management?—I agree with that.

21394. Do you think that the managers throughout the kingdom are so incompetent that they require to have somebody every month to see that they are carrying out their work?—A great many of the managers themselves, just like mine inspectors, have so many duties to perform that they are not able to be underground every day.

21395. Do you think it is possible to have too much inspection?—It might be possible to have too much inspection.

21396. What do you think would be too much?—I do not think once a month would be too much.

21397. (*Chairman*). I see in the Bill under Section 6 it says "In every district an inspector shall make a complete examination of every mine and every part thereof at least once in every six months"?—Yes, "at least." I think it is very moderate.

21398. (*Mr. Ratcliffe Ellis.*) With reference to inspection by the workmen in Scotland, do you know any reason why the men should be more afraid of their employers than in other parts of the kingdom?—No.

21399. In Northumberland and Durham are you aware that these inspections are frequently made by the men?—I have no knowledge of that.

21400. Would that alter your view as to what is the reason in Scotland?—I do not know. In Durham and Northumberland the system of working is different.

21401. You think the reason the men do not make the inspection is because they are afraid of reprisals?—We have not always found men to undertake the duty, although we pay for it.

21402. It is suggested by some of the inspectors that there is another reason. Mr. Ronaldson says at *Q.* 4980: "Do you suggest to the owners and the men that such inspection should take place?—(*A.*) I have suggested it, but I have been met with this reply—that the Government inspectors are paid for inspecting, and the men are not going to do it. I do not say that is the general feeling, but that is the reply which has been given when we have spoken about the matter"?—I have never heard such a thing.

21403. You do not agree with that?—No. In our case I never heard a reason of that kind being given.

21404. You want Government inspection once a month?—Yes, I think generally once a month.

21405. What is this inspection by the men to be for? Is that in order to do something which the Government inspector neglects to do, or in order to satisfy the men?—It is to do both things.

21406. Do you think a Government inspection once a month is not enough to secure safety?—No, a general inspection.

21407. An inspection by a Government inspector, perhaps I ought to say?—Do you suggest that should do away——

21408. I am asking, if you got your inspection by the Government inspector every month, what is the object of having inspection by the men?—If we get a daily inspection by the men, it might not be necessary to have so frequent Government inspections.

21409. Do you suggest that there should be an inspection by a Government inspector once a month?—Yes.

21410. What is the object in having, in addition to that, the right to have an itinerant inspector appointed, or two, by the men, to go through the different mines in the same district?—If we had the Government inspectors appointed,

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that would do away greatly with the necessity for having both things. We would not require so much local pit inspection if there was systematic Government inspection once a month.

21411. Is the object of Rule 38 to secure the safety of the men or to satisfy the men that it is safe ?—It is to secure the safety of the men and to satisfy the men also.

21412. Do you not think for that purpose under Rule 38 that the best persons to inspect it would be the people who are actually working in the mine ? They would know more about the condition of the mine than anyone else ?—There is the objection which I have mentioned to you, the difficulty of getting those men to carry out the work.

21413. Subject to our getting rid of this terrible fear of consequences, do you think that those would be the best men for the purpose ?—Yes.

21414. Do you think that there is such a fear that reprisals might be made that you could not get the men at the mine to do it ?—We have difficulty just now in getting the men to do it.

21415. Do you not think you could get men working at another mine to do it ?—If they are working at another mine, information may be sent if they make themselves obnoxious. The managers may assist each other, and the workmen may be interfered with at another mine.

21416. You are saying first of all that the owner of the mine himself would do something serious to the men if they were in his employ, and if they were working in anybody's else employ the owner would communicate with that employer and induce him to make reprisals on the men ?—No, not the owner, the management.

21417. Well, the management. Have you any reason for thinking that is so ?—If I were a colliery manager it would be reasonable to expect it if a workman inspected the pits under my charge and made a point of going very minutely into the matter and showing up every point of danger : I think human nature would be such that I could not avoid having such feeling.

21418. That is what you would do ?—Probably.

21419. We will put it that probably the manager might not do it ?—I do not think it is probable.

21420. You propose that there should be what I call itinerant inspectors appointed, not necessarily men engaged in practical mining, but people who may at some time have been down a pit ?—That the workmen should have the right to select practical men who have the qualifications specified in the Coal Mines Act without being limited to selecting men at present working as miners.

21421. Who in your mine would be selected, and who would select them ?—There might be the men's representatives.

21422. You would not propose that the men at each pit should select their own representatives ?—There might be checkweighers appointed, for instance.

21423. The idea is that the Miners' Organisation should appoint some of their officials to make this inspection ?—No, that the workmen in a mine should appoint somebody they were satisfied with.

21424. I suppose that your mind is running on checkweighmen ?—That is one class of workmen at present in my mind.

21425. The checkweighman is the miners' agent. The miners' agent would be appointed for this work ?—A checkweighman is not a miners' agent.

21426. Very frequently I think he is ?—He may be.

21427. There are certain things he cannot do as a miners' agent, but assuming it is a miners' official, it would be an official of the miners' union ?—That is the only class that they can be drawn from.

21428. Assume a checkweigher or some official of the Miners' Organisation. There are not infrequently questions arising as to wages and other things between the management and the miner ?—Yes.

21429. You have said what you would do as a manager. I will put this to you ; if you were a manager, would you think it right that a miner's agent should come down the pit at any time he thought fit, and make any inspection, and have every facility afforded to him without any responsibility to anybody except the Miners' Federation ? —Not at any time of course, that he wanted, but within a reasonable time.

21430. How often should he go. Your Bill puts no restriction upon the time he is to go there. He can go whenever he likes : "Such examiners may at any time examine the mine or any part thereof or any old workings shafts machinery or apparatus connected therewith and every facility shall be afforded for any such examination by the owner agent and manager of the mine." Do you think it would be reasonable to impose upon a manager the obligation to allow the miners' agent at any time he thought fit to come down that mine under pretence of coming to examine, when he might have many other things in his mind ?—Putting it that way, I do not think that was what was contemplated.

21431. I put it in that way. Is that a fair thing to ask a manager to agree to ?—No, I should admit that it is not.

21432. What restriction would you put upon it that he should not use this power which is given him to the detriment of the employer, or for any purpose except *bona fide* examination into the safety of the mine ?—I do not see how he could use a power of that kind to the detriment of the owner. If he made an untrue report, that would be to his own detriment.

21433. I am not talking of a question of safety ; I am assuming he goes down and there is a dispute on, and. to put it plainly, that he makes mischief. He is not under any restriction, as a Government inspector is, not to use the information he gets. He is not responsible to anybody or to any Government Department, and he is under no obligation to the manager to refrain from using the information which he gets. What restriction would you put upon that ?—We have no experience of that kind in Lanarkshire. I should say that in 95 per cent. of our collieries the management at the present moment would have no objection to the miners' agent going down the pit.

21434. But the 5 per cent. might have a very great objection to it, and what you are proposing to do is that he should go there as a matter of right whether the manager likes it or not. Again, I call your attention to the proposal in this Bill that the result of his examination he must communicate to the workmen, and, if dangerous, to the inspector. There is no obligation on him to communicate the result of it to the management ?—I think that is a mistake ; there should be.

21435. Do you think, that this clause as it is in your Bill, wants very considerable revising ?—Yes, I think it would be open to revising.

21436. And this further, that this power should not be given unless it is subject to restrictions similar to those of a Government inspector, that the information should not be used to the detriment of the employer except on the ground of safety ?—It would be unfair that it should be used for any other purpose except safety.

21437. Now I want to ask you about the firemen. I see Mr. Ronaldson does not agree about these firemen. He thinks on the whole that they do their work pretty well, and he was asked if it was necessary that they should have certificates, and he said they would not be the worse for having them, but that he did not think it was necessary to make them compulsory. That was his view about it. Do you think generally that the firemen do their work satisfactorily ?—I have said so.

21438. It is only exceptional that they do not do so ?—Yes.

21439. The men who do the work satisfactorily now are not certificated workmen ?—No.

21440. Why do you think those men would be improved by having a certificate ?—Because in one individual case an incompetent man might be employed, and a serious accident result. We should all agree that we should have some protection against that.

21441. If a man is employed who is not competent, the management are responsible ?—Yes.

21442. Is that not a sufficient protection ? Do not you think for his own sake a manager would employ a man at any rate whom he believed to be competent?—Generally speaking, I think he would.

21443. It would be very exceptional. Do you think those very exceptional cases justify legislation such as you have suggested, that no man should be qualified unless certificated ?—Only upon the ground that it would give greater safety.

21444. With reference to the area, that could be altered. If the areas are too big they could be reduced ?—Yes.

21445. And further, that the work of the firemen should be confined to the purpose of inspection. That could be done without legislation at all ?—Yes.

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21446. Do you think that in both those respects improvement might be made?—Yes, I think if that was done it would be a great improvement.

21447. Do the coal-getters often go from coal-getters to firemen?—I should think they do. Generally a large percentage of the firemen have been coal-getters. The coal-getter is a young man as a rule, and later on they may put him on to on-cost work, and then to be a fireman.

21448. When coal-getting becomes too hard work he becomes a fireman?—That is very often the case.

21449. With reference to these Poles, I see in the Inspector's report that he speaks rather well of them. I am referring to the evidence of Mr. Ronaldson: "(*Q.*) I believe there are a large number of foreigners who are working in your districts, are there not?—(*A.*) There are a good number of Polish workmen. (*Q.*) Do you think that they have any bad influence on the mines?—(*A.*) Not at all I have watched for years the conduct of those men; they are far more amenable to discipline than our own men. It is the universal testimony of the managers that these men are much more amenable to discipline, and that they will do what they are told. If they know that they are obliged to to a thing they will do it, and they are a striking contrast to a good many of our own workmen in that respect. I have only so far come across one case of a trifling accident, apparently, where one of those foreign workmen was the cause of another man meeting with an injury." Then the next question was: "Do you consider that the presence of those Poles has a good influence in the mine?—(*A*) I do not know whether I can go to that length, but they certainly are much more reasonable in carrying out the instructions than our own men, and I do not think their presence can be proved to be in the slightest way a menace to the lives and limbs of the rest of the workmen." That is the opinion of Mr. Ronaldson?—I disagree with that.

21450. What evidence have you except your own opinion?—I have no evidence that I could prove except my own opinion.

21451. How came you to hold that opinion?—I do not think in the first place it is commonsense to expect that a man who has never seen a coal-pit, and who does not know about the dangers of coalmining, can safely be sent down into a fiery mine with another man who, to put it at the best, has an imperfect knowledge of mining.

21452. That would not weigh against the opinion of the man who has watched these matters?—I do not see how he could. He only goes round once a year. How can he watch discipline as affecting workmen? I do not understand what he means.

21453. He says: "I have watched for years the conduct of these men"?—How could he? I think he must be making a mistake.

21454. Whether or not he is making a mistake do you not think that the view of a man who has been watching them for years is certainly as reliable as your opinion without any evidence in support of it?—My daily life is to a greater extent among them than his.

21455. Are these men in the Union?—Yes.

21456. But they work for less money?—They do not if we can prevent it.

21457. You say they do manage in some way?—Where there is a regular standard rate fixed we take care that they do not work lower than that if we can find it out.

21458. Your objection is purely on the ground of safety?—Absolutely.

21459. Is there a single accident which you can trace to the employment of these men?—I could not say that I could prove it, but the managers themselves have come to that conclusion. I can point to a colliery in the Blantyre district, Craighead Colliery.

21460. If you have not a case you can prove I do not think we ought to take the names you mention?—There is another, Cadzow Colliery. That is within 200 yards of where I live. The manager dismissed every Pole in his employment and for some years has not employed one, and that was on the ground that he believed them to be a danger to safety.

21461. What manager was that?—Mr. MacVie, of Cadzow.

21462. Do you think that that gentleman could say something about these Poles?—Yes, and there is another I would specify, one of Messrs. William Baird and Company's managers, Mr. Miller, of Craighead Colliery, Blantyre. He also has reduced the number of Poles. There used to be 50 per cent. of the men Polish miners, but now I think there are not more than 5 per cent.

21463. With reference to the Special Rules, did I understand you to say that you thought the miner would carry out the rules better if he had a voice in the making of them?—Yes.

21464. What voice in making them do you propose to give to the miner who has to carry out these rules?—He should get proper notice when the rules are under consideration, so that he could discuss them either through his trade organisation or——

21465. I can understand the trade organisation would do it, but so far as the miner is concerned I want to know how it would affect his observing the rules or not, because he would have no voice in the making of the rules?—By attending a meeting of his fellow-workmen at which the matter would be fully discussed, and if they had any objections they would raise them there.

21466. He would get information as to what the rules were by attending a discussion by his representative?—Yes, through some medium, I think.

21467. Why cannot the representative give him that information now?—They are posted up before the representatives know anything about them.

21468. These Special Rules have been established for years?—They are established now.

21469. Do you take pains now to instruct the men in these rules?—Unfortunately, like other people, our lives are pretty much taken up with other matters.

21470. How do you propose that he should get the information which he cannot get now—I will not say does not?—If they had the information before the Rules were carried into law it would create a discussion, to begin with. Through that discussion he would go minutely into the matter, and it would be on his memory, and he may be in a better position to observe the Rules.

21471. That cannot apply to the Rules existing now?—No.

21472. You do not propose to take any steps to encourage him to carry out these rules?—We always advise him to be very careful and to carry out the rules.

21473. Do you explain to them what the rules are?—Yes, generally their attention is drawn to them when an accident takes place.

21474. I do not see what disadvantage the workmen would be under if the representatives explained to them the effect of these rules, and I do not see why the representatives cannot do that now?—They can as the occasion arises.

21475. With reference to making new rules, how do you propose exactly the proceeding should be? Supposing the owner considers that there is a necessity for a new rule and wishes to propose one under the Act, what has he to do?—Supposing he proposed that, I do not see anything to hinder him also making it public to his men, if it is going to be in the interests of safety. I do not see how the men could object if it is workable.

21476. Do you suggest he should have the sanction of the men before he proposes the rule, or that they should have an opportunity of objecting to it afterwards?—If a dispute arose I should think it might be settled by the Government inspector.

21477. Do you suggest, because we may possibly agree to that, that he should have the men's sanction before he proposes a rule, or that the men should have the right to object before it is established?—I do not see the distinction very clearly.

21478. Supposing you say before an employer proposes a rule that he must have the men's sanction to it?—He might propose the rule.

21479. Would this meet with your views, that the owner should be entitled to propose a rule as he can now, send it up to the Home Office, but before it is established and becomes law that they should advertise this rule inviting any person interested, either workmen or anybody else interested, to make an objection to it, and then that the Home Office should consider the objections, and if they thought that they were such as should require to be considered, that they should then refer the matter to arbitration?—Yes, that would go a long way to meet our views on the matter.

21480. You think if that was done the men would be encouraged to carry out the rules more than they are now?—Yes, I think it would have that effect.

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21481. With regard to the winding enginemen, do I understand you to say that in cases of dispute where the winding engineman had refused to work that the employer was not to be allowed to get any other winding engineman to get access to his pit?—No, I did not suggest that. I only suggested that he should not be allowed to get anybody except a skilled man.

21482. What is he to do when there is a dispute and his own men refuse him access to his own pit? Is he to give them their terms, or is the place to be drowned out rather than allow some man who has not a certificate to do it?—That is his look out.

21483. Is the place to be drowned out until he settles the terms with the trades organisation?—On the other hand the men would have no object in stopping work—I mean the miner who is not a party to the quarrel.

21484. The coal owners should not allow, according to the Bill brought into Parliament, and should be under serious penalty for allowing anybody to wind up and down the pit who had not got a certificate?—That is so.

21485. If he has a dispute with a limited number of persons who have certificates, is he to have no means of access except by giving them their own terms?—He could easily get out of the difficulty. Part of his staff might be qualified as enginemen and doing other work at the colliery.

21486. You have heard the difficulty about only selecting people they will teach. It is no use having a certificate unless the owner is prevented having access to his pit except by a man who has got a certificate?—That is so.

21487. If there is a limit put on the people allowed to get certificates and those who have certificates will not work, he must have his pit drowned out or agree to their terms?—That is the point as to whether the engine keepers, through the trades organisation, should have a right to put down a limit.

21488. I am looking for safety. This pit might be drowned out and anybody necessarily down below to look after safety and keep it in condition might be injured, and still the owner is not allowed to wind people up and down that pit unless they have a certificate, and if he cannot arrange with a man who has a certificate the whole place must be destroyed?—I think that is an extraordinary view to take of the subject.

21489. I want to put it to you if that is not the fact, and that would be the result?—I do not admit that the engine keepers have a right to restrict the number of men to get certificates.

21490. How would you provide that they shall be made to teach a man? If you can suggest how that can be done I think it would be of great use. You cannct make them teach them?—I think the employers could do it invariably just now. I do not know of any difficulty in that direction which they have ever had. There are none which I have heard of in Scotland.

21491. However, that would be a serious state of things?—Provided the engine keepers had power to limit the number of men to be trained enginemen I think it would be.

21492. Do you know at collieries there are men, who are not trained men, who are capable of winding in an emergency?—Partly capable I should say.

21493. You would prevent the owner employing those men?—Unless they had qualified.

21494. Although he has a class of men whom he can employ in an emergency as you call it, when his own men will not work, you would prevent him employing them for this purpose?—I do not think the men's lives should be handed into their care if they are not practical men.

21495. Now I want to ask you about prosecutions and fining. According to the law of Scotland the Procurator Fiscal decides whether a man is to be prosecuted?—Yes.

21496. The owner cannot prosecute?—No.

21497. The inspector cannot prosecute?—No, unless through the Procurator Fiscal.

21498. I do not think you disagreed as to this, that for trivial offences if a workman agrees to pay a fine rather than go to the trouble of going to the sheriff and give it to some charitable object, that he might do so?—We no not believe in that system.

21499. What would happen where there is a breach of the Act and discipline has been broken?—Would you insist upon a prosecution in every case?—It might reduce the number of breaches of the Act if the man was prosecuted rather than fined.

21500. You think they ought to be prosecuted in every case?—I do.

21501. (*Mr. F. L. Davis.*) On the question of timbering you think if men were specially told off to do the timbering instead of the coal getter that there would be fewer accidents?—I think so.

21502. Mr. Ellis put it to the last witness, do you happen to know this is done in Northumberland and Durham?—I have heard so.

21503. And that the accidents from falls of roof and sides are higher in some cases there than they are where the coal getter does his own timbering in our districts?—That may be on account of the difference in the strata.

21504.—There may be something in that, but at any rate that is the case there. What would you suggest, that there should be a divided responsibility between the man appointed to do the timbering and the coal getter, or that the man appointed should do the whole thing?—The timbering should be done by men specially employed for that work, while at the same time the miner, if he noticed a bad stone in his place, would attend to that; while being generally freed from the work of timbering he would be expected to watch for any special circumstances which might arise, and attend to it.

21505. You must have more than one man in each district to look after the timbering?—A sufficient number, to do it properly.

21506. One man could not be in every place at the same time?—No.

21507. It would mean employing more men?—Yes, it would take a certain number of men in each pit to do the work at present done by the miner.

21508. Do you not think the coal-getter should be the man responsible for the safety of his place, and also that he is the best man to look after it?—As a man with practical knowledge of coal-mining, I should say almost the first aim of the miner is to get as much coal as he can, and that he takes risks. As we say in Scotland, he is afraid to lose his ben, afraid of not keeping his tub filled with his fellow workmen, and because of being pressed to make a wage he neglects timbering.

21509. Take such a man: what would his attitude be to the men appointed to do the timbering for him? If it interfered with his work he would want him to slack off?—I think that could be done without any interference with the miner's work.

21510. Supposing something considerable had to be done in the way of timbering—you say you would leave it to the coal-getter to put up a stone or something of that sort—he would have to wait for this man to come round?—They are generally ready for a rest: a miner is almost at any time, if he can take it.

21511. He does not work eight hours?—He does as a rule.

21512. (*Dr. Haldane.*) He would take a rest at his own expense?—He would probably be ready to take a rest, and be glad to have an excuse to do it.

21513. (*Mr. F. L. Davis.*) If an eight hours bank to bank day were compulsory, he would have less opportunity of taking a rest?—He is glad to have an occasion of that kind as an excuse.

21514. (*Dr. Haldane.*) You are strongly in favour of facilities being provided at the mine for workmen to wash and change their clothing when they reach the surface. Have you seen the arrangements which have been made for this purpose in foreign countries?—I have heard of them, but I have not seen them.

21515. Do you know what they are exactly?—I have a general knowledge of them.

21516. Have you thought out in detail how an arrangement of that sort could best be made, and how the baths or shower baths could be arranged?—No, I have not given it much thought.

21517. You have not seen how they manage it at gasworks. They have arrangements at some gasworks?—No, I have not seen them.

21518. Do you think the men would be distinctly in favour of these arrangements?—They have expressed themselves as being in favour of them.

21519. It has been discussed in your district?—Not very much, I should say, but generally they are in favour of something of the kind being done. It has not been much discussed.

21520. You put it there on the ground partly, at least,

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of health. Is it really on the ground of health that you think these facilities are desirable, or is it on the ground of general comfort and decency?—I think it is more on those grounds than on the ground of health.

21521. You are not aware of any very distinct reason on the ground of health for this?—No, I am not.

21522. Do you think it is undesirable the colliers should go about the streets all black as they do at present?—I think it would be better for everybody concerned if they got back home from their work in something like decency. At present their homes in Scotland are as a rule very much worse than they are in other parts of the country. There are not the same facilities for cleanliness.

21523. Do you know whether their wives complain of that?—They have been brought up to it.

21524. We ought to have some evidence from some of the wives, I think, on this subject. You are also in favour of underground conveniences. Have you seen any mess from this cause in the mines from want of conveniences?—Yes. I have worked as a miner myself, and you cannot go to a place that has a convenience. There is a terrible mess where workmen go to.

21525. Old roads?—Yes. There is absolutely no convenience that I know of in any pit—at least in any pits that I have been in.

21526. In the case of men working at the face, they always use the goaf?—Yes.

21527. That would not cause any nuisance or trouble. There is plenty of coal dust?—I did not understand you. They generally go into an old road that has been used.

21528. At the working face do not they go into the waste? I am not sure what it is called in Scotland—the goaf?—In the workings I have been in there are no open spaces except old roads to go into. The roof is allowed to come in.

21529. Is it stoop and room, or long-wall workings?—Both.

21530. There is no space?—It is what they call the cundy. It would be unbearable there; we could not work, it would be too close to the face.

21531. There is usually plenty of coal dust to cover things up?—That is not done.

21532. That is not done in Scotland?—No.

21533. In consequence of that the same places have to be used again and again?—Yes, that is the rule.

21534. In that case it is bound to get very nasty?—Yes.

21535. Do you think it would be desirable to have conveniences that were regularly emptied at places of that sort?—I certainly think that would be much better.

21536. Are they provided in any Scottish mines that you know of?—None that I know of.

21537. These Poles who come to Scotland have never worked underground before?—The majority have not. We have no definite proof of that. I should take it that it is admitted even by the employers who take them on that the majority have not worked in mines before.

21538. In that case they are not at all likely to be affected?—There is less danger of that.

21539. No Italians come to Scotland?—None that I know of. Certainly there are none in Lanarkshire.

21540. Have you ever heard of Cornishmen coming to Scotland?—Not many.

21541. I want to be clear about the appointment of this suggested new class of inspectors. You propose that they should be appointed by the men. Do you mean that, not that they should be appointed by the Home Office—paid by the Home Office, but appointed by the men?—That point has not been much discussed with us, although I am informed that is the law in France. The workmen select in certain districts the inspector by vote every third year.

21542. Do you think that is a suitable way of finding out who the best men are?—French people tell us it has been very satisfactory, and so far as I know the employers have no objection to raise to that course.

21543. (*Mr. Ratcliffe Ellis.*) In France there is no objection?—Not so far as I know. That is the only place where the system has been tried that I know of.

21544. Still the choice would be very limited by the conditions as to possession of a certificate?—Yes. We do not ask that it should be open to any workman to be appointed, only qualified men who can pass the examination.

21545. That would be rather an anomalous thing to have an appointment made by men in any district and the salary paid by the Government. I do not think there is any precedent for such a mode of appointment, is there?—Except in France; that is the only place.

21546. I mean in England?—No, there is no place that I know of where there is anything of that kind.

21547. (*Mr. Smillie.*) In dealing with the figures of fatal accidents from falls at the face, the question was put to you were you aware that the fatal accidents from falls at the working face in Durham, were higher where the special timbering was done by the men appointed by the employer, than it was in the Midlands. You stated that you had not gone into the matter very much, but the figures prove that the number of accidents is higher at the face in Durham, where the timbering is done by special men, than it is in Nottingham and Derbyshire and other Midland counties where it is done by the workmen. Your answer was that would depend upon the nature of the workings?—Yes.

21548. Would you be surprised to know that in Scotland where it is done by the workmen, the number of accidents is considerably higher than even it is in Durham?—That is bearing out what I say; it may be because of the nature of the strata.

21549. You cannot say that the number of accidents depends upon whether it is done by the workmen or persons specially appointed for the purpose. I find Scotland stands considerably higher even than Durham. 74 fatal accidents took place in 1905 at the face, where 114,000 persons were employed, as against 41 in Durham where 93,000 persons were employed. That would rather argue in favour, if you compare Scotland with Durham, of the timbering being done by special men?—Yes, from the figures.

21550. Dr. Haldane put a question to you in which he is deeply interested, and so am I, about the health of the workmen and providing baths. You said that you advocated those more for the comfort of the workmen than from a health point of view. Is it not the case that a large number of Scottish miners travel a considerable distance by train to and from their work? That is so.

21551. And a very large number of them in Lanarkshire, because of the collieries being shallow, work in very wet workings?—Yes.

21552. Is it the case that some of them before they are 10 minutes at work in the morning are wet through?—Yes, there are cases of that kind.

21553. And very often they have to travel 10 or 15 miles home?—Yes.

21554. Must not that be a very serious thing so far as their health is concerned in bringing rheumatism and asthma?—I should think so. I was dealing with the general question, not with special instances.

21555. That might be taken into consideration in determining whether it would be a good thing to have baths?—Yes.

21556. You know the homes of the Scottish miners very well?—Yes.

21557. Often a miner with his family may be situated in a house with one apartment?—Yes. There are a good many people situated like that.

21558. 14 ft. square, and where the sleeping, cleaning and cooking must take place in the one apartment?—Yes.

21559. And two or three sets of pit clothes are round the fire drying overnight for the next morning?—Yes.

21560. It would be a good thing if they could be removed at the pit bank and dried there, and the men go home clean and tidy?—We condemn that system. We think that class of house should disappear and that people should be provided with better houses. We do not suggest the change on the ground of perpetuating the use of houses of that description, which I understand are in existence in other places.

21561. (*Dr. Haldane.*) Do these exist to any considerable extent?—Yes, there are hundreds.

21562. (*Mr. Smillie.*) Thousands?—I should not put it thousands. The employers in building houses now are putting up a better class of house, but in old colliery villages there are some very poor places.

21563. I suppose that is for want of room. A man would not go to a house like that?—They were satisfied with less accommodation in the past, I suppose. They charge very, very low rents, and if they had a choice of a larger house they would have a larger rental to pay. Even

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now some men able to afford it take the cheaper houses rather than provide the accommodation they can afford to pay for.

21564. (*Mr. F. L. Davis.*) Is it simply one room by itself, or one room in a house ?—No, it is a house.

(*Mr. Smillie.*) There may be a row of 20 houses, and each of them is a single-apartment house with a door coming into that single apartment, and there are two beds in the house, and the cooking, the cleaning, the births and deaths all take place there, and the pit clothes are dried in that one apartment 14 ft. square. There are hundreds of cases.

21565. (*Mr. Ratcliffe Ellis.*) You do not expect that is going to be perpetuated ?—No, I think that should be wiped out as quickly as possible.

21566. (*Mr. Smillie.*) I think it would be the greatest blessing that could be conferred upon the miners' wives if the men changed their clothes and cleaned themselves at the pit before they came home ?—Yes, undoubtedly it would.

21567. You say you would be satisfied with Mr. Ellis's method of establishing Special Rules ?—Yes, I think that would meet our objections to a very large extent.

21568. Are you not aware that is practically the position at the present time ?

(*Mr. Ratcliffe Ellis.*) No. It is different. First of all there is no opportunity for the men directly to make any objection or be represented. I propose that they should be. Secondly, I propose that there should not be an arbitration, each side appointing one arbitrator and the two an umpire, but failing agreement an arbitrator to be appointed by a Judge of the High Court. My idea is, the men would have an opportunity of objecting to the rule and of being represented at the arbitration.

21569. (*Mr. Smillie.*) There is an opportunity of objection to the rule when it is posted by the Home Office ? —Yes, but it is then in force.

21570. I suppose you think that the workmen are jointly connected with the mines of this country, and to some extent that their lives should give them the same right to propose Special Rules as the employers who have the capital invested ?—Undoubtedly.

21571. If you give the employers that method of establishing Special Rules, would you claim that the workmen might have a right of proposing Special Rules to the Home Office for their safety ?—Certainly; that the workmen should have the same right as the employers to suggest any improvement if necessary.

21572. Mr. Ellis put it that the employers should not be placed in the position, if the engine-winders came out on strike, that their property should be destroyed because they could not start a person without a certificate. Is the employer not in that position now ? If the certificated mine managers came out on strike, they could not carry on their mines with persons who might be qualified but did not hold a certificate. Is not that so ?—That is so.

21573. (*Mr. Ratcliffe Ellis.*) There never has been a case of that sort known. He knew a case of the other sort ?— I did not know a case.

21574. You mentioned where there was a difficulty to fill a gap ?—I thought you said a case where the colliery had been ruined.

(*Mr. Ratcliffe Ellis.*) It might have been.

21575. (*Mr. Smillie.*) If it is possible to ruin a colliery for want of certificated engine-winders, would it not be possible to do so for want of certificated managers ?— Certainly.

21576. You have never heard that urged as a reason why managers should not hold certificates ?—No.

21577. (*Chairman.*) Continuing the question of the winding certificates, a case of emergency might arise; supposing the certificate was necessary and a case of emergency arose when some winding had to be done, somebody would have to do it as best he could. Supposing there was imminent danger of flooding, or the men were required to be taken up from a pit, and the man whose duty it was was ill. In that case the same difficulty would arise. You would have some man to do it whose ordinary work it was not, but the machinery would have to be set going by somebody ?—There should be an exception made in the case of an emergency.

21578. You would not object, supposing there was a provision in the Act of Parliament to say that the winder must have a certificate, but that in any case of emergency anybody who was capable of doing so should attend to the machine ?—No, we should not object to that.

21579. With regard to the firemen, I understand that your idea is that not only are the firemen made to do too much, so that they cannot possibly perform all the duties they nominally are obliged to perform, but you also say that those firemen are appointed not altogether because they are good men to look after the safety of the miners, but also because good men to look after the working of the mine ?—Yes.

21580. The men are employed by managers, partly, no doubt, to look after the safety of the men, but also in the interests of the managers themselves ?—Yes.

21581. Do you think if the firemen were not required to look after the working of the mine, but simply appointed to look after the safety of the workers, the probability would be that the managers would appoint better men ?— Yes, better men.

21582. They have now two things to consider; first of all, whether the fireman is competent to look after the safety of his brother workers; also under the present state of things they have an eye, at least it is conceivable they might, to their own interests in appointing men who would be able to look after the working of the mine from the point of view of the manager's interest ?—The two things are connected. We say that they ought to have a certificate of efficiency to be able to do the work, because if you do not carry that out and you free the firemen from part of the duties they are now performing, it might be open to the manager to employ the cheapest man he could get, an old man, for instance; or a man not having other work to do might be a cheaper man. The protection would be that he should only employ a man who had a certificate of competency.

21583. You consider that in some respects the curtailment of the duties of the firemen might induce managers to appoint a man who was not up to his business ?—That is so, for a lower wage.

21584. As to Clause 8 of the Bill about the second enquiry after the Coroner's Inquest after an accident, your Bill says that six workmen should be empowered to claim another enquiry. It was suggested by Mr. Weir that even one person might be empowered to claim an enquiry. What do you think about that ?—I think, in the first place, if we had it that six workmen had a right, it would go a long way to meet that.

21585. It was also suggested by Mr. Ellis that if six workmen had a right to do so, that a mine manager or any mine official who was found guilty of gross negligence, or even manslaughter, by a Coroner's Jury, should have the same right ?—I think it would be quite reasonable that he should have a right.

21586. You suggest in your Bill, Clause 10, Sub-section 2, "Any person authorised by one or more workmen at the mine at which the explosion or accident has occurred may attend and examine any witness, either in person or by his counsel, solicitor or agent." Do you find any practical difficulty in getting the Court to listen to anything that may be said on behalf of the workmen ?—In fatal accident enquiries ?

21587. Yes.—Not in Scotland. We get every facility in Scotland.

21588. As far as you are concerned in Scotland you have not much to say about this ?—There is no complaint at all about that.

(*Chairman.*) I do not know how far that alters the law.

21589. (*Mr. Ratcliffe Ellis.*) The last Fatal Accidents Act gave them that right ?—We had the right. It was questioned sometimes by Sheriffs, but it was ultimately admitted.

(*Chairman.*) This does away with any doubts.

(*Mr. Smillie.*) It gives the power to England and Wales that we have now in Scotland under the Fatal Accidents Enquiry Act.

(*Chairman.*) That is the effect of Clause 10, Sub-section 2, to give to England the same power the workmen have in Scotland.

(*Mr. Ratcliffe Ellis.*) There are no inquests in Scotland.

21590. (*Chairman.*) Their place is taken by the Fatal Accidents Act. With regard to the appointment of Government Inspectors, at present, it is in the option

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Mr. D. Gilmour.
11 June 1907

of the Home Office, whether a man passes any examination or not; he need have no experience, and pass no examinations. As a matter of fact the examinations are stiff, and the experience required considerable, but any Home Secretary might alter his mind and say, "I want to appoint so-and-so and do away with the qualifications." The qualifications are not statutory. Do you suggest any statutory qualifications? — At present we have no ground of complaint. The Home Office has evidently carried it through in the spirit in which we believe it should be carried through.

21591. You are satisfied with the appointments that have been made, and you hope and trust that the future appointments will be as good?—We have no objection in Scotland, as far as I know.

21592. Still, you want more appointments?—Yes, more appointments.

THIRTY-THIRD DAY.

Wednesday, 12th June, 1907.

At Edinburgh.

PRESENT:

Lord MONKSWELL (*Chairman*).

F. L. DAVIS, Esq.
ENOCH EDWARDS, Esq., M.P.
THOMAS RATCLIFFE ELLIS, Esq.
JOHN SCOTT HALDANE, Esq., F.R.S.
ROBERT SMILLIE, Esq.
S. W. HARRIS, Esq. (*Secretary*).

Mr. PETER MUIR, called and examined.

Mr. Peter Muir.
12 June 1907

21593. (*Mr. Smillie.*) Are you the Secretary and one of the Agents of the Ayrshire Miners' Union?—Yes.

21594. Is the Ayrshire Miners' Union connected with the Scottish Miners' Federation?—Yes.

21595. Had you had considerable experience as an underground worker previous to taking your present post?—Yes.

21596. Has your attention been called to a statement made by Mr. Ronaldson, a Mines Inspector, on the question of discipline in the Scottish mines?—My attention has been drawn to it.

21597. Are you aware that he stated in evidence before this Commission that the Miners' Association sometimes defended their members who were charged with a breach of the Mines Act?—I am aware that that statement has been made.

21598. And that in making that statement he particularly referred to Ayrshire?—I so understand.

21599. Is it the general rule that your Association defends men who are charged with a breach of the Mines Act?—The rule that we have hitherto followed is that when a party is charged with a breach of the Mines Act, and asseverates that he is innocent, we only give him legal advice to prove whether he is innocent or guilty, and beyond that we do not go.

21600. I suppose we may take it that the Union would not defend a member if they thought he was guilty of a breach of the Mines Act?—We have never done so.

21601. But you have given legal advice to members charged with breaches of the Mines Act who you believed were innocent?—Yes.

21602. Do you think that the giving of legal advice to your members who are charged with a breach of the Mines Act has led to a want of discipline amongst the underground workers, and that it has encouraged men to be guilty of a breach of the Mines Act?—There is no influence of that kind that I am aware of. We have always set our faces against any infringement of the Mines Act, and, as I have said, it is only those cases where the men have very strongly asseverated their innocence, and even in some cases brought witnesses to substantiate their position, that we have given them legal aid to try and prove their innocence.

21603. Do you encourage your members, so far as you possibly can, at your meetings and otherwise, to observe the Coal Mines Regulation Acts and the Special Rules?—In every case we encourage them to observe the law in the way of promoting the safety of the miners.

21604. Do you know whether or not there is any really serious want of discipline in your mines in Ayrshire?—I am not aware that it is any worse than any other county in Great Britain. I have never heard that—in fact, some of our folks complain that we are over-disciplined in some cases.

21605. Some of the miners?—Yes.

21606. They complain that the discipline is too strict?—Yes, in some cases.

21607. You do not encourage them to be guilty of breaches of discipline?—Certainly not.

21608. Is there any system of fines imposed by any of the managers in your county for breaches of the Special Rules, or of the Mines Acts, instead of taking the men before the Law Courts?—There are present to my mind just now two firms who have tried the fining system, and I understand it is enforced where the men submit to it, but, of course, in some cases they have had to give way.

21609. Do you yourself think a system of fines would lead to discipline, more so than prosecutions before the Court?—I understand you mean by fining that the firms themselves fine.

21610. That the management fine the workmen. Do you think that would tend to improve discipline? Would it be more of a warning to the men if you took them before the Court than having a system of fining?—I do think it would be. I think prosecution by the local authorities is more effective.

21611. Therefore you do not favour a system of fining?—No.

21612. You say in a letter which you have sent to the Secretary that you are in favour of more extensive Government inspection of the mines?—Yes.

21613. Do you think that the present system of inspection is effective?—When you read the latest report of our inspector in the West of Scotland, where he himself states that they have been able to inspect each mine once for the year 1906—I do not think it goes beyond that—I think it will be easily understood that is not a very effective inspection. I take it that a good number of those inspections would be the outcome of accidents taking place in the particular mines.

21614. So far as your opinion goes, do you know whether or not there are thorough inspections of the mines in Ayrshire undertaken by the Mines Inspector—and what I mean by thorough inspection is all the places being visited by the inspector?—My only experience in that respect is

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this: that I have heard statements made very frequently that the working places are not inspected—there is just, I might say, a general inspection of perhaps the main roads, and so on.

21615. That, you think, is not sufficiently frequent?—Quite so. I have had such statements made to me frequently. It is hardly yet a fortnight old since one old miner with 40 years' experience told me he had not seen a mines inspector in his working place three times in the whole of his experience.

21616. You are dealing now with inspection by the Government Inspector, and not, of course, by the workmen's inspectors?—Yes.

21617. Have you any number of additional inspectors in your mind that you would like to see appointed?—The question has been very frequently discussed amongst our people in Ayrshire, and the desire is expressed that there should be additional inspectors, but we have hitherto not been able to put it in force.

21618. Have you in your mind any particular number of additional Government inspectors that you would like to see appointed in order to make the inspection effective?—We have a feeling—a conviction really—that there should be additional inspectors, so that the changing nature of the mines might be more frequently brought within their purview, because it is not possible for the existing number to do it effectively.

21619. Do the District inspectors, and the two assistant inspectors, for the West of Scotland, reside in Glasgow?—I think there is one at Rutherglen.

21620. Is that just outside Glasgow?—Yes.

21621. What distance is the residence of the inspectors in Glasgow from the extreme end of your county?—Roughly, about 55 miles.

21622. That would be about two hours or two and half hours' journey by ordinary train?—About that.

21623. (*Mr. Ratcliffe Ellis.*) Is that the extreme distance to the collieries?—Where the collieries are situate.

21624. (*Mr. Smillie.*) That is what you mean, where the colliery is situate?—Yes. I think the South of Ayrshire collieries would be the furthest away, and it would be about 55 miles from where Mr. Ronaldson and his assistants live. It would be five or six miles further into the Dumfriesshire collieries.

21625. It is over 60 miles really to the extreme point of Mr. Ronaldson's district from Glasgow in that direction?—Yes.

21626. And his district may extend in the other direction north of Glasgow?—Yes.

21627. So that a considerable part of the Inspector's time would be taken up in travelling if there are many inspections made in those collieries?—A very large proportion of the time would be taken up in travelling. When you go past the principal towns the trains are very infrequent, and a lot of time is wasted in getting to and from the collieries.

21628. Do you favour the idea of assistant inspectors being appointed who would reside in the mining districts more closely in touch with the collieries?—I think, besides more frequent inspections, the fact that they did reside nearer would conduce to better inspections.

21629. Have you in your mind any number of workmen for whom you would like to see an inspector appointed—I mean would you say 10,000 or 5,000 men, or what number do you think an inspector could effectively inspect a mine for?—10,000 has been frequently spoken about, but in respect of the pits I have most experience of 10,000 would be a big number, for this reason, that the pits, in my experience, are small pits in Ayrshire generally, and that, of course, means that there is more labour entailed in inspecting what would cover 10,000 men.

21630. You mean by small pits that they vary from the employment of about 30 to 200 people, perhaps?—Yes, about 100 is a common thing with us.

21631. So that 10,000 would practically mean the whole of Ayrshire?—Yes.

21632. Which would be a very large district for an inspector to inspect?—Over 100 pits.

21633. I believe you are not satisfied with the present arrangements as to the appointments for inspection by the workmen, and you say you want an alteration in Rule 38 of the Mines Act. Are you satisfied with that rule as it stands at present, viz., that they have power to appoint two working miners to inspect the colliery?—We can hardly say we are satisfied, for the simple reason that only on two or three occasions has it ever been put in force in Ayrshire. The reason, plainly speaking, is that the men employed in the colliery are afraid to do the inspection and take the responsibility involved in giving a report because of what they fear might happen.

21634. Is it a fear merely, or, so far as you know, is there any ground for the fear? Have there been any cases of victimisation or illtreatment, so far as you know?—Well, one old miner reported to me less than three months ago that he had done it once—it is a very old story—and because of the treatment meted out to him at that time it was never attempted again in the Ayrshire district.

21635. That would be years ago?—Yes, years ago.

21636. You have no such experience of recent years?—No, we have never tried it, for the reason I indicate, of the feeling amongst the miners that it would not be safe for them to do it.

21637. So far as the right is concerned, you would be satisfied if the workmen had the right to appoint working miners or those who had been practical working miners?—Yes.

21638. You would be quite satisfied if the words were "or had been a practical working miner"?—Yes.

21639. Have you any idea of the extent of the firemen's district in Ayrshire?—I could not say beyond this, that they are generally bound to keep within the statutory limits, that is, to do the rounds within the two hours prescribed by statute.

21640. Do you think that they are able, as a matter of fact, to make the statutory examination necessary by law to its fullest extent in two hours?—Complaints have frequently reached us that men were given districts that they could not cover. In fact, it is within a month I have complained to Mr. Ronaldson as to one district, because by visiting the colliery and looking at the plans they acquainted me of their opinion that he was able to do it, but the firemen who were formerly in the position still assert that it is impossible.

21641. You have had a complaint as to the extent of a district and have reported that to the Mines Inspector?—Yes, about a month ago.

21642. Has he made enquiries?—I had a reply from him saying his assistant had been down at the colliery, and he found it could be done within the prescribed time. I have been there since, and the men still assert it cannot; and the inspector was not down the pit.

21643. You have been at the colliery since, and the workmen assert the work cannot be done?—That is so.

21644. But the Mines Inspector, without going down the pit, has found it can be done?—That is so.

21645. It is complained generally that the districts are too large?—We have complaints arising occasionally, but I would not like to say they are general. Now and then perhaps a complaint comes in at an interval of six months.

21646. What are the duties of a fireman at the collieries in Ayrshire? Is the duty confined to looking after the ventilation and the safety of the mine at the face, or are there other duties they have to perform?—I understand at some of the smaller collieries, where their statutory duties are not very exacting, they are set to perform other classes of work.

21647. What kind of work?—I think it is what is called repairing work.

21648. Do you know of any cases in which they are responsible for looking after the pony-drivers and getting the hutches out?—I could not specify any case of that kind

21649. I suppose you consider that the position of a fireman is a very important position?—Yes.

21650. You have not very much explosive gas in Ayrshire?—No, we are pretty free from that.

21651. It is a non-fiery district?—Yes. At a few collieries they do use safety lamps.

21652. Is it the case that there is a very considerable amount of what is known as black damp in some of the Ayrshire collieries?—Yes, more or less.

21653. I suppose you consider that that requires to be guarded against as much as explosive gas?—Quite as much.

21654. Do you consider that it would be an additional qualification to a fireman if he held a certificate of competency after examination?—We have very pronounced

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Mr. Peter Muir.

12 June 1907

opinions upon that, in our part of the country. The fireman, it is very often understood, is appointed not because of his experience or his qualifications, but largely for cheapness; and we think that some kind of examination should be undergone by men undertaking such a responsible position.

21655. (*Chairman.*) You mean they are paid too little to obtain the services of the best men? Is that what you mean by "cheapness"?—Yes. I maintain that cheapness is an element in getting them appointed to these positions.

21656. You think if a man were compelled to have a certificate before he could be made a fireman, he would not work for such small wages as he could be got to work for now?—That is so.

21657. (*Mr. Smillie.*) Can you give us any idea roughly of the wages paid to men in this position?—At the present moment firemen in Ayrshire will be receiving a wage ranging from about 5s. 4d. per day up to what we recognise as our wage just now, 6s. 6d.

21658. (*Mr. Enoch Edwards.*) Is that the nett wage?—That is the nett wage.

21659. (*Mr. Smillie.*) On the question of the drafting of Special Rules, I notice that you say that the workmen's representatives should be consulted by the Home Office in the framing of Special Rules. Have the workmen in Ayrshire, or Scotland generally, been consulted previously in the framing of any special rules, do you know?—Never that I am aware of.

21661. Do you consider that the rules would be more likely to be observed if the workmen had a voice in the framing of them?—Yes.

21661A. Do you think that any assistance gained from the experience could be given by the workmen in the framing of rules for their own safety?—I am satisfied that anything embodying the desires of the workmen would contribute to greater safety and be more respected, because they would have had a say in it. Meantime they grumble very loudly that these rules are framed and established, and that no one representing them has ever had to do with the framing of them.

21662. The present system of timbering in Ayrshire is that the workmen look after their safety in the working face?—That is so.

21663. Have you any opinion on that matter, as to whether that system should be altered?—I have never given very much attention to that point; but there is no doubt it would induce to greater safety if some arrangements could be made whereby special men should be set apart to do it or to see to it.

21664. Either to do the timbering or to supervise the timbering being done?—Yes.

21665. I notice you say that the man appointed to the position of fireman should have experience in timbering and other matters. Do you think the fireman should be the person specially appointed for either doing the timbering or supervising its being done?—What was in my mind when I wrote that was that under the existing law the fireman should, but I am not sure that the duties would not be too onerous for the fireman if he also had to supervise the timbering.

21666. Unless the districts were made considerably smaller?—Yes.

21667. It might be possible to make the districts smaller so as to enable him to thoroughly supervise the timbering of the working places?—Yes.

21668. (*Chairman*). And if the places were sufficiently small you think it would be advantageous that the fireman should combine both duties?—That is so.

21669. (*Mr. Smillie.*) His experience places him in a position to know where danger exists from falls?—That is so.

21670. And consequently he would be the best person to know what was needed?—Yes.

21671. Have you any very large number of foreign workmen working in the mines in Ayrshire?—I can only give a general estimate, they are such a fluctuating quantity with us. I think the number of underground foreign workmen in Ayrshire at the present moment, and for some time past, would not exceed more than 200 to 300.

21672. (*Chairman.*) Out of how many workers altogether, do you say?—Out of about 10,600.

21673. (*Dr. Haldane.*) Are those nearly all Poles?—Nearly all Poles with an odd exception—there are two or three Germans, but an inappreciable number.

21674. (*Mr. Smillie.*) I suppose you have no fault to find with the German workmen?—None whatever.

21675. They are practical miners before they come to your mines?—Quite so.

21676. And you have no fault to find with foreigners if they are skilled and experienced workmen, and understand the language?—No.

21677. Do you think that workmen who do not understand the language constitute a serious danger to themselves and to other workmen?—It is not very pronounced with us, but it is usually understood that if they were put into a fiery mine the danger would be pronounced.

21678. It would be increased?—Increased very much.

21679. (*Chairman.*) You say you are quite satisfied with the Germans who work in the mines. Do the Germans workers understand English?—Very imperfectly. We have only a few, but the few I have come across can converse with you, although it is somewhat difficult for them.

21680. Do they know enough English to make it safe for them to work in the mines? Do they understand the rules and regulations?—It seems so. They have always been able to follow their instructions fairly well.

21681. (*Mr. Smillie.*) The Germans to whom you refer have been a considerable time in this country?—That is so.

21682. And you have heard no fault found with them as not being able to understand the rules?—No, there is never any complaint.

21683. They are efficient miners, of course?—Yes.

21684. You know there is a strong feeling among the Scotch miners generally on the question of the employment of foreign workmen who do not understand the language?—That is so.

21685. Have you any extensive system of mechanical haulage in the pits in Ayrshire?—Yes; it extends pretty generally through the newer collieries especially.

21686. You are aware that there are a considerable number of accidents arising from mechanical haulage?—Yes.

21687. Would you be in favour of enforcing the system of a continuous chain, or rope attachment, over a train of hutches or trams which were in process of being conveyed to the pit bottom?—In view of the frequency of these accidents, and the simplicity of the arrangement, we think it should be made compulsory that some arrangement of the kind you indicate should be put in force to guard against a breakaway.

21688. Have you anything of that kind at the present time?—I could not specify any particular case. I do not know of any.

21689. (*Mr. Ratcliffe Ellis.*) How long is it since you worked in the mine?—It would be nearly 30 years ago.

21690. And since that time you have been a miner's agent, I suppose?—Most of the time.

21691. Are you frequently down the pits now?—Occasionally, just now and then.

21692. Why do you go down now?—If there is a dispute between a section of the men and the employers indicate their wish, perhaps, for us to go down and have a look, in those cases we go.

21693. That is not for safety?—No.

21694. What is the object of that visit?—It is generally proposed to decide as to whether the men are being fairly treated in their payments.

21695. Now supposing the management decline to allow you to go down, how would the dispute then proceed?—If the management object we accept unreservedly the statements coming from the men's side.

21696. With reference to defending a man, you do not see any harm in the Union defending a man for an offence of which you think he is not guilty?—We wish, in taking up this attitude, to give the man, who asseverates his innocence, the benefit of the doubt until he is proved innocent or guilty.

21697. And there can be no harm in assisting him to prove his innocence?—No.

21698. Do you pay the fine if the Court finds him guilty?—We have never paid a fine.

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21699. Have you a rule which says you shall not pay the fine?—We have no rule; but we have been appealed to frequently and we have consistently refused to pay fines where parties have been found guilty.

21700. Even where it is a case in which you thought you should assist in defending?—Yes.

21701. In those cases, if the Court finds he is guilty, you do not pay the fine?—We do not pay the fine.

21702. You say that you generally encourage your members to observe the regulations—Certainly.

21703. How do you do that?—When we are holding meetings and points of this kind arise.

21704. Points of which kind?—Regarding cases where men have got involved. We take the opportunity usually of telling them that for their own sakes they should observe the law.

21705. Are any of those speeches reported anywhere?—Not very frequently.

21706. Do you happen to have the report of a speech in which you have encouraged them, for instance, to obey the law?—I could not give you the report of any speech.

21707. You make a great many speeches, I have no doubt, that are reported from time to time?—We are pretty frequently at that.

21708. You have never had a speech reported in which you have encouraged them to obey the discipline of the pit?—We have never taken the opportunity, even if it was reported, to preserve it for any specific purpose. Such speeches may have been reported, but I think it is very well known amongst the management that we take up the attitude of encouraging an observance of the law and everything pertaining to the safety of the mine.

21709. The mines inspectors for Scotland suggest that the discipline is not satisfactory because, in some cases, the men are defiant altogether, and have not been brought up to obedience, and it is very difficult to maintain discipline. Is that so?—As I have said, I have never heard any complaints on a matter of that kind.

21710. From whom would you be likely to hear complaints? Not from the men?—The complaint comes usually the other way that they are too much tied down.

21711. Do you agree with the inspectors' view that there is a great absence of discipline amongst the men, that they are not amenable to discipline, and will not obey orders?—I would not like to say that that obtains to any large extent.

21712. Would you like to say it does not?—I believe in individual cases there are foolish people who will kick against instructions making for their safety; but I do not think that obtains to any great extent.

21713. Not to any sufficient extent to affect the general safety?—That is so.

21714-5. With reference to fines and prosecutions, there are many breaches of discipline that are not in themselves of a very serious character, I suppose?—That is so.

21716. Do you advise in those cases, where it is not a very serious breach, but it is a breach, there should be a prosecution?—I know that the expenses of a prosecution and the trouble are always considerable. We quite recognise that.

21717. To both sides?—Yes.

21718. Would you advise that there should be in all these cases a prosecution?—I could not advise it.

21719. Would you advise that it should be passed over altogether?—I think there is always another way of getting at it. The management usually has sufficient authority to put that right.

21720. How—discharging the men?—Not exactly discharging, but the issue of cautions and letting them know that consequences will ensue.

21721. How often should they be repeated, do you think?—That is a matter of discretion.

21722. What is your objection to a fine agreed to by the men for trivial cases? If the management and the men agree that a small fine should be paid, why do you object to it?—Because I do not think it is so effective as a prosecution. I was looking at it in a general way.

21723. And the management should decide whether they should prosecute or whether they should pass it over—that they should do either one or the other?—Yes.

21724. You think that is conducive to discipline?—I should think it was.

21725. With reference to the inspection by Government inspectors: you do not suppose these Government inspectors are to manage the collieries?—Not for one moment.

21726. Is their duty, in your view, to be more than seeing that the collieries are being properly managed by the responsible management?—I think that is exactly the duty.

21727. Do you think that an examination every six months of each colliery by the inspector would be sufficient?—That is a matter of opinion, but I think it should not be less.

21728. How frequently do you think there should be an inspection of each colliery by a Government inspector?—I find that at the present time it does not come much more frequently than once in 12 months; and, speaking generally, I think that is a great deal too seldom.

21729. I wanted to get your opinion as to how frequent you think it ought to be?—I think it would not be asking too much to have a mine examined once every three or four months, in view of the constant changing nature of the conditions.

21730. Do you think that is necessary in every case in every mine, or are there some mines which you think might be less frequently inspected?—That would depend largely on the conditions attaching to the mine.

21731. What conditions?—The changes in some mines are more thorough and they need to be attended to.

21732. Tell us the changes you have in your mind which would necessitate a more frequent inspection?—Well, the main roads may be altered.

21733. In what way altered?—By going in different directions.

21734. Extended merely?—In the case of extension there is not the same necessity for a renewed inspection.

21735. What kind of alteration in the main road do you think necessitates more frequent inspection?—Looking for the material in different directions.

21736. What material?—Coal or ironstone.

21737. As to the road itself, what conditions are in your mind which make you think they would necessitate a more frequent inspection?—Where the conditions of the mine have, as I have said, radically changed in the meantime.

21738.—If the conditions of the mine have not radically changed in the meantime the inspections would not need to be so frequent?—They would not.

21739. What do you mean by a radical change? What would contribute to it?—A lot of things might contribute to the change.

21740. What things?—As I have said, the whole character of the pit might change in the meantime.

21741. Have you ever known a case in which within six months the whole character of the mine changed?—I have known it taking place, in these small pits especially, very frequently.

21742. That the whole character of the mine changed, or is it you mean the whole character of the seam of coal changes?—No, but in the looking for the seam and the getting it.

21743. Take a case where they have the seam and they are working it. I want your view, in connection with this radical change, which you say you think would necessitate a more frequent inspection?—Well, that is the only explanation I can give.

21744. You think that the inspection should be more frequent because of the danger of radical changes in the mine occurring between one inspection and another?—Yes.

21745. (*Chairman.*) Do you suggest it would be necessary to have a government inspection every three or four months in most of the pits with which you are acquainted?—Generally speaking.

21746. In most of the pits you think it would be desirable?—Yes.

21747. (*Mr. Ratcliffe Ellis.*) In most of the pits with which you are acquainted?—Yes.

21748. Is there a radical change which takes place within a period of three or four months?—I might say generally that does obtain.

21749. There is a radical change in the whole character of the pits?—In the older pits, I should say.

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Mr. Peter Muir.

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21750. Take the newer pits. Do you think the inspection should be as frequent as every three or four months in the newer pits?—I do not think there is the same pressing necessity.

21751. Where the conditions of the pit are pretty much the same then the inspection is not required to be frequent?—That is so.

21752. Had this old miner you spoke of, who said he had never seen an inspector in his working place more than three or four times in 30 years, been working at different places during that time?—I understood he was working generally in the same locality. He did not specify them.

21753. Different pits in the same locality?—Yes, different pits in the same locality.

21754. And working in different working places?—Yes, that is possible.

21755. So that a mines inspector might go into the place where he had been working a fortnight before, but not in the place where he was then working?—That is possible.

21756. And the mines inspector might have been in that place where he was then working a fortnight before?—It is possible that might happen.

21757. Have you any reason in your mind why you should fix 10,000 men as the number that should be subject to one inspector?—The reason why I fix that number is that I have looked at our own locality and its needs.

21758. In your locality you have 10,000 or thereabouts, and you do not think the number of inspectors sufficient for that?—That is so.

21759. How many inspectors are there?—There are three for the West of Scotland; but that takes in, I think, half of Lanarkshire roughly.

21760. What is the number of men in that district?—Between 40,000 and 50,000.

21761. I think we were informed 46,000; and there are three inspectors for 46,000 underground workers?—Yes.

21762. You think there should be one at least for every district?—Yes.

21763. And that is the way in which you come to fix 10,000?—I stated also that our district was peculiar in having so many small pits, which increases the labour.

21764. You think in your district there should be at least one inspector for 10,000, on account of the peculiarity of the district?—Yes.

21765. That is how you get at the 10,000?—That is so.

21766. Now with reference to Rule 38. The Act provides that practical working miners may themselves have an opportunity of making an inspection?—Yes.

21767. Can you suggest better persons to do it than the men themselves in the mine, putting aside fear of consequences?—The men in the mine are thoroughly capable of doing it.

21768. And are they not the best men to do it if these reprisals were not feared?—I believe that to be so.

21769. You mentioned one case in respect of which you heard of an old man who suffered from making an unfavourable report?—That is so.

21770. How long ago was that?—It must have been between 20 and 30 years ago.

21771. That is the only case you have where it is suggested that a bad report was made and he had to suffer for it?—That is so.

21772. Did you ever hear of another case?—I should explain that we have never tried to avail ourselves of that for a long number of years in Ayrshire because of the known fear on the part of the men who do it.

21773. 30 years ago there was no Miners' Federation in Ayrshire?—No.

21774. There was no organisation whatever?—That is so.

21775. But you choose to think that because 30 years ago one case happened where a man was punished—and we will assume he was punished—for making a bad report, that the same state of things would continue now?—We have no reason to think otherwise.

21776. And that fear has been upon you ever since?—That is so.

21777. Do you suggest that this inspection under Rule 38 should be made by anyone appointed by the miners' organisation?—I think so, if they have proved experience.

21778. Who is to decide that question?—I do not think the miners themselves, if they wanted an inspection, would appoint a man who had not experience.

21779. They might be mistaken. You propose that they should be left untrammelled as to the person who is sent there?—Yes.

21780. In the present Act it says a mining engineer is not to be sent?—Yes.

21781. Why is that? Do you propose that that should be altered also?—I expect that that prohibition is there because he is thought to be an interested party.

21782. Would not a miners' representative be an interested party also?—Certainly, in the same sense.

21783. Do you think it would be reasonable that that power of inspection should be extended to anyone to be appointed by the miners' organisation unless he was controlled in the same way as the Government Inspector is as to the use he should make of the information he might get when he made the inspection?—I expect, although he made a report, the employer would still have a way of getting that report reviewed.

21784. I am thinking of other things. You went down the pit occasionally in order to settle disputes which had arisen. Now supposing you had been refused, then you would be entitled to go if you were appointed to make an inspection under the pretence of safety?—Yes.

21785. Do you think there should be any limit put upon the use a man should make of this power to go down these pits?—Personally, I should agree that his power should be limited to the object laid down.

21786. That he should be put under certain restrictions as to the use he might make of it, and the way in which the power should be exercised?—That is so.

21787. Have you any notion as to what that restriction or limitation should be?—I have never given any thought to the question of limitation.

21788. You agree there should be a limitation, or it might be mischievous?—That is so.

21789. I think I understood you to say, or in effect this was your view that generally the firemen do their duty satisfactorily if their districts are not too large?—Yes, generally speaking.

21790. In exceptional cases that is not so, the districts are too large, and the men are not competent?—Yes.

21791. What proportion do these exceptional cases bear to the whole, do you think? How many objections have you had during the last 12 months?—We have never gone into it closely as to the extent to which it prevails, but, judging from the frequency of the complaints, I should be inclined to think that at least 25 per cent. of the men should not be in positions of the kind.

21792. Does that apply to particular collieries? Are there certain collieries to which there is no objection?—I would not like to specify any particular colliery.

21793. Are there collieries where the system is you give a man a limited area and you appoint competent men? Are there collieries to which you have no objection on either ground?—Yes.

21794-5. Your objection is confined to certain collieries?—Yes.

21796. Are the collieries, as regards which you have complaint to make, 25 per cent. of the whole?—I am giving a rough idea from the frequency of the complaints.

21797. I understood you to say it was only occasionally that these complaints were made?—Yes, it is from the frequency of the complaints coming in—occasionally, put it in that way.

21798. I do not understand that? Do these complaints come in frequently or occasionally?—Put it occasionally.

21799. Are they in reference to the same pits?—It is distributed pretty generally.

21800. You have mentioned one case in which you complained to the inspector that the district was too large. Is that the only complaint you ever made?—No.

21801. How often have you complained to the inspector?—Charging my memory, I believe I have complained within the last two or three years, perhaps, three or four times.

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21802. They are the only occasions you have had to complain ?—That is so.

21803. The inspector on the last occasion inquired into it ?—Yes.

21804. He came to the conclusion that the district was not too large, rightly or wrongly ?—Yes.

21805. What was the result of the previous complaint that you made ?—As a rule the inspector finds out that the firemen can do the thing in the time prescribed. There was one case which occurs to me just now where, I think, there had to be a little curtailment to enable them to do it.

21806. Except in one case the inspector has inquired into it and come to the conclusion that the districts are not too large ?—Yes.

21807. In that one complaint, in the case where he thought it was too large, what happened then ?—It was put right.

21808. You think that the fireman should have a certificate of competency. What is the examination to be ? Ought he to have a second-class certificate, or ought there to be some special examination ?—I think that a special examination should be set for a man undertaking special duties.

21809. Why should not a second-class certificate be sufficient? Why should there be a special examination ?—I think that would be quite satisfactory.

21810. Not a special examination ?—There is one little difficulty with me in the second-class certificate. I hardly think that the practical experience is commensurate with duties of that kind.

21811. He must have five years' practical experience in a mine ?—I am speaking from what I know of some who hold these ; in the mine they have very little practical experience of coal getting or working at the face.

21812. They do not want experience in coal getting for inspecting ?—They are none the worse for it.

21813. They are hardly any the better for it ?—Yes, they would be better for it.

21814. Do you think for the position of fireman that a man ought to be better qualified than for the position of under-manager ?—He ought to be equal.

21815. The second-class you would give him would give him that ?—Yes ; I would not have any serious objection.

21816. The wages range from 5s. 4d. to 6s. 6d. a day ?—Yes.

21817. What do you suggest it ought to be ?—It is rather a delicate matter for me to suggest the wage, but, I think, in a responsible position that they should at least have the wage that is recognised as being paid to the working miner at the face who, while work may be hard, has less responsibility.

21818. A working man at the face has the chance of only working two or three days a week and the fireman works every day ?—Yes.

21819. At the week's end, although there is a less wage for the fireman, he may have more wages in his pocket ?—But he has given the service for it.

21820. Do you think that the fireman should have the same daily wage as the collier when the fireman is working every day and the collier taking the risk of only working two or three days a week ?—I do not think it right that a man should accept serious responsibilities unless he is fairly well paid.

21821. You do not think 6s. 6d. a day is enough. Do you know if there is any difficulty in getting this class of man at 6s. 6d. a day ?—There seems to be no difficulty in getting them.

21822. Where you have no complaint to make of the competency of a man in a colliery is that the wage there ?—Where the recognised wages are paid we hardly ever have a complaint.

21823. What is the recognised wage ?—6s. 6d.

21824. Where 6s. 6d. is paid you never have any complaints ?—I cannot remember any just now.

21825. You look upon 6s. 6d. as more like the wage than 5s. 4d. ?—It seems to command a better class of man.

21826. As to the Special Rules : do you think that the miners' representatives should be consulted ?—I think so.

21827. In what way ? Have you any scheme in your mind as to how that could be carried out ?—I have no scheme in my mind, but I think that where a change is desirable that those who represent the men should be consulted before the thing is established.

21828. I agree, but the question is the time exactly when they should be consulted. At the present time the owner is bound under the Act of Parliament when he establishes a colliery to propose Special Rules ?—Yes.

21829. He is entitled at any time after the establishment of these rules to propose amendments to those rules ?—Yes.

21830. Do you suggest that he should not be entitled to propose an amendment without the men's consent ?—I think that he should be consulted and that the men should be consulted, and then that it should be left in the hands of the Home Secretary and his advisers.

21831. Would this suit you : supposing the owner is left at liberty to propose a new rule to the Home Office and before establishing the rule and making it binding on anybody the Home Office should advertise this rule as proposed by the owner, and then the men or any person interested should have an opportunity of objecting to it, and their objections considered, and if they cannot be met that the matter should be referred to arbitration ?—I believe that would meet the case to a large extent.

21832. To what extent would it not meet the case ?—It seems to me to be fairly reasonable.

21833. You do not want anything that is not fairly reasonable ?—No.

21834. Now with regard to timbering ; do the men do the timbering themselves ?—Yes.

21835. I dare say they think they can do it better than anybody else. Is that so ?—I expect they know their needs quite well.

21836. Is not the collier himself the best man to do the timbering : he is constantly in the place and on the watch, and he sees when timbering is wanted and puts it up. Is he not the best man to do it ?—There are other elements to be considered.

21837. I am not forgetting those, but from the point of view of safety is he not the best man to do it ?—I admit that.

21838. It takes some of the time he would use in getting coal to put this timber up ?—Yes.

21839. Do you want him to have all his time to get coal and somebody else to put the timber up ?—If it could be reasonably arranged, I think, it would work better for safety.

21840. You have already told me that you think the collier is the best man to do it, and could do it most consistently with safety ?—Yes, but the other man, if appointed, is supposed to have a knowledge equal to the miner who is working.

21841. Do you think there are many people who have the same knowledge of timbering as an old miner accustomed to do it all his life ?—It is not an old miner in every case.

21842. Take the generality of miners, a man who has had two years at the face is pretty well up to this. Supposing there is a man appointed to do the timbering he would have to be appointed for a number of places ?—That is so.

21843. Supposing a collier finds some timbering wants putting up, is he to stop his work and wait till this man comes to put the timber up ?—We quite recognise that there would be a little difficulty in that respect, but whether it would be greater than the danger that accrues from the present condition of things is the point.

21844. Why does danger accrue now if the best man to put up the timber is the collier ?—That brings me to the point I wish to get at : no matter how you impress on miners the need for safety, they are paid for piecework just now, and the anxiety to get the wage sometimes overcomes the feeling that they should stay from getting coal and prop their places and make them more secure.

21845. Do you suggest if that obligation which the coal worker is now paid for is transferred to the management, that there should be a reduction in his wages ?—In the coal-getter's wage ?

21846. Yes ?—That would be a matter of arrangement. What is present to my mind is, if it could be adopted, a day wage for the coal-getter.

21847. That is altering the whole system of payment. Do you suggest if the collier is to be relieved of this duty because he wants more time to get coal, that he would be content in return for the greater safety to part with a proportion of his wages towards paying the man to do the work he at present does ?—I am not prepared to answer that.

21848. That wants a good deal of consideration ?—Yes.

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Mr. Peter Muir.

12 June 1907

21849. The whole subject wants a good deal of consideration ?—Yes.

21850. Now with regard to foreign labour: your objection, I understand, is that a man cannct understand what is said to him if he cannot speak Scotch, or whatever they talk in these mines ?—That is really the main objection.

21851. I suppose that some Poles can speak English ?—A few.

21852. Can they speak as much English as the Germans you mentioned ?—I have come across individuals amongst them who could. I would not like to say the proportion, but in my experience you get one in ten or a dozen who can act as interpreter.

21853. When a man comes to be sufficiently acquainted with the language to understand what is said to him, your objection would vanish ?—Yes.

21854. Are they good workmen ?—Some of them are very good workmen ; others are not. They are brought over and learn by experience.

21855. Do you agree with the views of Mr. Ronaldson that they are very good men, amenable to discipline and very satisfactory ?—I can hardly go the length of Mr. Ronaldson. I believe that they obey orders so far as they understand them fairly well.

21856. With regard to haulage, would you be glad to see some arrangement by which it could be made safer ? —Yes.

21857. And that some expedient should be adopted for preventing tubs running away, and if they do that they should be rendered less dangerous ?—Yes.

21858. (*Mr. Enoch Edwards.*) I want to ask you first of all about this question of firemen and firemen's certificates. Mr. Ellis has been suggesting to you that the second-class certificate might cover a fireman ?—Yes.

21859. When you came here this morning was that what was in your mind—a second-class certificate ?—No ; I was thinking about the nature of the certificate. I had it generally in my mind that they should have a certificate of some kind, indicating their ability for the post.

21860. That is to say, the general manager who is responsible for the pit has a first-class certificate ?—Yes.

21861. His under-manager has a second-class certificate ? —Yes.

21862. There is no provision made to test the capacity of firemen ?—That is so.

21863. In that sense you think this man should in some way pass an examination to qualify him for his duties as a fireman ?—That is what was in my mind.

21864. The position of a fireman in your County would hardly be as onerous and dangerous as in fiery districts ?—It is not as onerous as in Lanarkshire ; the elements are not so pronounced with us : we have few mines where they use safety lamps, but the naked light is very common and of course the black damp. The ventilation and the roof and sides are practically the main duties of the firemen.

21865. Is the coal got mostly by blasting ?—Generally.

21866. Do the firemen fire shots ?—In some collieries there are appointed shot-firers. In most cases the men fire their own shots.

21867. That is where they use naked lights ?—Yes.

21868. Is that rather the explanation of this low wage, because the duties are not so onerous ?—I rather think that it will be an element in it.

21869. That would be a lower wage than they pay in Lanarkshire ?—I could not say how they pay in Lanarkshire, but I anticipate it will.

21870. It is an unusual thing. Perhaps you have not had much experience beyond Ayrshire. It is an unusual thing to pay firemen a less wage than a collier ?—It is a very common thing to pay a fireman a less wage than a collier.

21871. With you ?—Yes.

21872. You said that there was no difficulty in filling these places ?—That is so.

21873. There would be greater difficulty if you had to submit to examination ?—Yes, that goes with it.

21874. Is there any reason to think that these firemen are not competent ?—The attraction for the place is this, that they have a little experience down below and the duties not being onerous they are glad to get this steady wage without having the qualifications that, generally speaking, we think they should have for a fireman's duties.

21875. If the mines were gassy, dry and dusty—— ? —They would be dangerous.

21876. And you would require a better class of firemen ? —That is so.

21877. With regard to the fines that have been imposed, do I understand you to say that they are imposed in Ayrshire in the colliery office ?—Yes, that is so,

21878. You have no fixed degrees of fines ?—No fixed tables.

21879. They are fixed as cases arise ?—They are just the whim of the moment.

21880. Who fixes them ?—The manager.

21881. He does not delegate that work to others, but does it himself ?—Not that I am aware of.

21882. And the man is expected to pay it, whatever it is ?—It is generally deducted from his pay in the office.

21883. Of course it is paid then ?—Yes.

21884. There is not so much difficulty about it then, is there ? Is he a consenting party to it ?—In most cases it has been consented to.

21885. What would happen if he did not consent ?—He would be dismissed probably.

21886. (*Mr. Ratcliffe Ellis*) How do you know that ?—It is the alternative usually.

(*Mr. Enoch Edwards.*) You know from experience what would happen in Ayrshire.

21887. (*Chairman*) Supposing he said "I would rather be prosecuted" ?—They would dismiss him.

21888. He would not be allowed to say "I would rather be prosecuted" If he said "I will not pay the fine," and if that was because he would rather be prosecuted, or for any other reason, he would be dismissed ?—So far as it comes within the scope of my knowledge, I do not think he has had the alternative of prosecution.

21889. If he says "I do not think I am guilty and I will not pay the fine," he would be dismissed ?—That is so.

21890. Supposing he said "I want the case tried in a Court of Law : I want you to prove my guilt" : do you think notwithstanding that he expressed his willingness to let the matter be settled by a Court of Law, still the management would dismiss him ? That is your belief ?—I am inclined to think that.

21891. You do not know of a case where a man has said "I do not believe I am guilty : I want my case tried in a Court of Law" ?—No case has come before me.

21892. (*Mr Enoch Edwards.*) There are a number of fines imposed in your district ?—That is so.

21893. Your men object to fines I take it ?—They do.

21894. They would prefer, if there is a case, that they should be prosecuted in a court ?—That is the general feeling.

21895. Are there many prosecutions in court now ?—I have not taken a note of the number ; they generally appear in our inspector's report.

21896. In the inspector's report which I have before me you form one quarter of the whole area, and there have been 103 prosecutions during the year, 14 against managers or officials and 89 against workmen, so that so far as discipline and carelessness are concerned they are a very fair proportion—the managers are as bad as the workmen ? —I think we have a fair proportion in Ayrshire.

21897. There are 14 officials and 89 workmen. Have you any knowledge at all, or have you ever heard of a case of a manager being guilty of a breach and the inspector going to the office and asking him to pay a fine in the same way as a workman is asked ?—I have never heard of that.

21898. He would be taken before the court ?—That is so.

21899. They are supposed to do that ?—They are supposed to do that.

21900. Generally speaking, you say your Society encourages men in every way open to you to observe discipline ? —That is so.

21901. They realise that it is to the interest of the men ? —Yes.

21902. It is also essential to their safety that discipline should be observed ?—Yes.

21903. Although it may appear harsh and arbitrary that it should be observed, you agree with that ?—Yes.

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21904. When you said you defended members summoned for breaches of rules you did it only when you had a belief that the man was innocent?—They asserted their innocence.

21905. Has your Society in Ayrshire ever been driven by the men to the defence of an action when your Society believed it ought not to have been?—No; we have had frequently members of our Society who have been prosecuted, and before coming to the court they admitted their guilt and we had nothing to do with it. Sometimes they asked that they might have a lawyer to plead an extenuating circumstance, but we never condone their conduct or help them.

21906. You would pay for a lawyer after a man confessed he was guilty?—If he said "There is a certain thing I would like someone to put before the Bench" we have gone the length of saying "We will allow a man to put that before the Bench for you."

21907. You pay the lawyer?—Yes, but he pays his own fine.

21908. You realise that it would be rather a serious state of things if there were a shadow of truth in the suggestion that the unions of the country defended men guilty of deliberate breaches of the law which endangered the safety of the mine?—We have never done so.

21909. With reference to the question of workmen's inspection: you said that they had not resorted to it much in Ayrshire?—That is so.

21910. Not more than once or twice so far as you know. Do you suppose it arises out of sheer carelessness and indifference?—Generally, but the fear also operates. Since we began to get our men all gathered into a union we have not tried to enforce that. It has been frequently talked of taking advantage of it, but we have always had before our mind's eye that the fear would continue to operate more or less and we have not taken any steps to have it done.

21911. You are well organised?—Yes.

21912. You are members of the Scotch Miners' Federation?—Yes.

21913. Do you think to-day that if a mine was thought to be dangerous and gassy and your Society agreed to appoint two men, that there is a colliery owner in Ayrshire who would object to it at all?—I do not think they would object to the appointing of the men but what lies behind it is this: if the men happen to report adversely to the managers there is the idea that the manager would take some covert way in the future——

21914. Supposing they reported honestly what they saw. Usually they are accompanied by the under-manager?—Yes.

21915. So that the under-manager would have the same knowledge and be cognisant of it, too?—Yes.

21916. Do you suggest in these days if the men went down and found gas in a place not reported by the fir man and the under manager with them, and it is patent to all three, and that they reported that fact in a book, that the management would take advantage of them for it?—Certainly that feeling obtains.

21917. Do your men think there is the ground for it now that there was 20 or 30 years ago?—Of late years we have not seriously considered it, but the reasons why we think that the liberty should be enlarged in any new legislation is because everything of that kind would be set aside by allowing independent men of experience to do that work.

21918. So that if there is any ground for that in these days your union is not yet altogether omnipotent?—Not altogether.

21919. With regard to the special rules; have there been any special rules adopted in Ayrshire since you have been agent?—I really could not say as to the dates. I have been 16 or 18 years in this position. I am not sure as to the dates of the special rules.

21920. Since that time have the inspectors ever spoken to you about the special rules?—Never.

21921. (*Mr. Ratcliffe Ellis.*) There have been special rules during his time?—The timbering rules, but we never were consulted.

21922. (*Mr. Enoch Edwards.*) Do you suggest that the workmen should be consulted about and be a party to the rules the workmen are expected to observe before they are adopted?—That is so.

21923. When you were asked the distance the inspector had to travel you were familiar with the area of the district he has to inspect?—This particular place?

21924. You know the character of the country included in it?—Yes.

21925. You have some idea of the distance they have to travel?—Yes.

21926. In getting to collieries from your place what are the railway facilities like generally? Are there such things as express trains, or do you have to change at stations, I mean go by slow trains and wait?—In the bulk of our collieries they have to change in nearly every instance. Take for instance going from Glasgow to most of our collieries in the south of Ayrshire, they have to change at Kilmarnock or Ayr, and it perhaps takes an hour from Glasgow to either of these places by express train. More or less they have to wait half-an-hour or one hour for the train again. According to the colliery being visited, it takes anything from half an hour to one hour to get to the colliery again. From, say, Glasgow as a centre it might take, roughly speaking, two or two and a half hours to get to the colliery, and the same to get back again.

21927. A good deal of the inspectors' time is spent in travelling to and fro?—That is so.

21928. You think that if there are more districts and more inspectors that a lot of time would be saved?—Yes, if they were nearer the centre.

21929. In the case of the old man which Mr. Ellis has asked you questions upon, did he work in the pit 40 years?—Yes.

21930. During that time he had seen the inspector three times?—That is his statement.

21931. You were asked if he had worked continuously or whether he was shifted about, and your reply was that he had been shifted about?—I expect he would be more or less in that district, but in different pits.

21932. It may be possible that he worked at one pit and that the inspector visited the pit once a year and did not go into the neighbourhood where this man was working?—That is possible.

21933. The inspectors admit that they do not examine collieries but that they take samples, so that a man may not see an inspector during the whole of his lifetime?—That is quite possible.

21934. (*Mr. F. L. Davis.*) Are there within your knowledge any inspections made by workmen under rule 38?—No, except that case I have cited of the old man many years ago, no case has come within my knowledge.

21935. That is 30 years ago?—Yes.

21936. And the fear has been so great ever since that they have never made an inspection?—We have never cared to do it.

21937. Do you not think that there may be another reason besides the fear of being harshly treated by the management? Do you not think it is possible that it is the hard work which prevents them from doing it?—The hard work involved in the inspection?

21938. Yes?—I do not think so. I think so far as that is concerned, if we could feel assured that nothing in the nature of after consequences would take place there would be no difficulty in getting the inspection. It is not considered very hard work as a rule, making the inspection. The man at the face is working harder than he would be if he was making an inspection.

21939. Do you think you have a very strong case in stating this fear that exists: one case you mentioned 30 years ago, and they have never tried any inspection since?—There may have been cases but they are not present to my mind where they have tried it since. The general feeling is that it would be difficult to get men to do it for that reason.

21940. With regard to the firemen; you stated in your opinion that a large number of the men were incompetent?—That is my belief.

21941. And that the management got these men because they were cheaper?—That is so.

21942. Do you seriously suggest that the manager who is responsible if anything happens will purposely engage an incompetent man as a fireman?—They rely upon the comparative safety of the mine and the fact that they are comparatively free from fire-damp.

21943. Still you have mentioned the condition of the roads, roof and sides and black-damp, and other thing. If anything happens in the mine the manager is responsible?—That is so.

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21944. Do you think it is to his interest that he should appoint incompetent men ?—They seem to be dominated by the same feeling as I indicated in regard to the man timbering at the face. They see a chance of saving a little and they are willing to take risks. It seems to me that is at the bottom of it, and the manager, at least the overman who is certificated, is exercising a more or less constant supervision, too.

21945. (*Dr. Haldane.*) You mentioned black-damp as being a common thing in the Ayrshire mines. Does that mean that the lamp burns badly in the air ?—If it is sufficiently thick it goes out. It often occurs where they can work and is what is called bad air or want of ventilation. They can work, but at the same time it is bad for the men.

21946. What sort of mines are these ?—Are they shallow mines chiefly where that occurs ?—It might be anything from 80 to 100 fathoms. We have a few pits beyond that.

21947. They are not very deep ?—No.

21948. Is that black-damp a serious trouble ?—Very serious to the men working in it.

21949. In what way ? What effects are attributed to it ?—It affects his lungs and his general health and shortens his life.

21950. It is said to do so, but have you any reason to suppose that it does ?—There is no question that it does.

21951. Do the men ever get stupid with it. Have you ever heard of that ?—I have never heard of them getting stupid, but I have heard many a time complaints.

21952. That is unpleasant ?—Unpleasant and painful.

21953. In what way ?—Sore heads and the like of that if working in it.

21954. I suppose you are aware that the inspectors have sometimes considerable difficulty in dealing with bad ventilation of that kind ?—That is so.

21955. Where there is no cap shown on the lamp, only that the lamp burns badly ?—That is so.

21956. There is no definite standard of purity for the air ?—I rather think it is a matter of opinion for the inspector.

21957. Yes, but the inspectors say they have nothing definite to go by, and have a difficulty in bringing these cases into court ?—We had a very pronounced case five or six years ago. It was brought into court by Mr. Ronaldson, and although it was understood on every hand that the ventilation was excessively bad, because he had not bottled up some and analysed it, the management got off free.

21958. Because he had not done that ?—Yes.

21959. Supposing he had would he have been in any better case because the law says nothing ?—That was the plea the Sheriff made for allowing the management to get off in that case, that he ought to have brought a sample of the air complained about.

21960. You are clearly of opinion that it is a somewhat serious matter—I mean this black-damp in Ayrshire ?—Yes.

21961. And that it is not satisfactorily dealt with at present ?—No.

21962. It cannot be satisfactorily dealt with ?—That is so.

21693. Or at any rate, is not ?—In my opinion if the firemen themselves were a little more independent of their relationship with the employers it might be helpful in that direction.

21964. You mean to say that firemen would always detect this black-damp ?—That is so.

21965. Do you know if any explosions have ever happened through men mistaking black-damp for fire-damp ? —I cannot point to any just now.

21966. You are aware that it is a source of danger, where there is a mixture of the two gases together, and men may very well be deceived. People think something which really is fire-damp, black-damp ?—Black-damp shows differently in the light.

21967. Yes, but when you have a mixture of the two it is rather a difficulty. It is one of the dangers of black-damp that you may make a mistake with it. You have said you are of opinion that firemen are paid too little in many Scotch mines ?—Yes.

21968. Considering their responsibilities ?—That is so.

21969. Have you ever heard another complaint which once or twice has been made to me that the managers are often paid too little in Scotland ?—That does not come in our direction.

21970. It would be a very serious matter if it were true in the interests of safety and everything else. I did not know whether that question had ever come up. As regards foreigners you have no complaint as regards the quality of the men. You are not of opinion on the whole that there is an inferior class of men being brought into the country and that there is a danger from that ?—I know from my experience that some of them are very good men, but I believe in regard to the Poles that these are in the minority.

21971. Apart from their knowledge of mining altogether, you do not think they are a very inferior class that are coming into the country in this way ?—I could not say as to that, because you are not able to——

21972. It is difficult to judge ?—Yes.

21973. That is not the general impression, that they are a very inferior class ?—There is a feeling amongst our natives that they are not up to the standard that they ought to be.

21974. They are not up to the standard of these Germans you were speaking of ?—No, not even to them.

21975. They have no objection to them as foreigners ? —That is so.

21976. Their objections are based first on not understanding the language and being a source of danger ?—That is the principal and main objection.

21977. And that some of them are rather inferior men that it is not desirable to have ?—I think that obtains generally amongst the Poles. The few experienced men get these inexperienced men cheap.

21978. You are aware that in many foreign mines, and in English and Cornish mines for that matter, there are arrangements made so that the men can change their pit clothes and have a bath at the pit-head. Have you considered the desirability of that matter ?—I have been looking at the question, and I feel it would raise the status of the men morally and physically if some simple arrangement could be brought into play whereby cleanliness when they come up from the pit could be obtained, all the more so because their homes are not suitable for getting that as it should be.

21979. Have you ever heard that it produces much discomfort to the man's wife and family when he comes home in his pit clothes and has to change them and wash at home ?—It cannot do otherwise than produce discomfort in the home where it is one single apartment, and at the most two, which is a common thing.

21980. Do you say it is a common thing to have one room in a miner's house ?—It was very common in Ayrshire. It is not so common now. The general thing now is two.

21981. Are there any houses built now with only one room ?—Not now, but the old miners' rows, many of them, are single apartments. I believe there are hundreds in Ayrshire.

21982. What time would these houses be built ?—Any thing from 30 to 40 years ago, but the latest, I must admit, are an improvement.

21983. Are they ever built with bath-rooms ?—No bath-rooms of any kind.

21984. They are never built with bath-rooms ?—Never; just the room and kitchen, and they are both used for sleeping apartments.

21985. The common thing is two rooms in a house, and no bath-room ?—Yes.

21986. (*Chairman.*) You said that there is a common feeling among the miners that the discipline is too strict ? —That has been expressed many a time. I do not say that it is well-founded, but the men themselves think that they could do with a little less of it.

21987. They come to you with complaints that the Special Rules are unnecessarily enforced, or what is the complaint they bring to you ?—It has generally arisen from the enforcement of the Special Rules.

21988. Has your Union ever taken up the point that a Special Rule is unnecessary, and ought to be done away with ? Have they ever urged that upon the management ? —No, we have never raised the question as to the relaxation of the Rules in any way.

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21989. Although you have been asked by the men?—Individuals, whenever they have felt the pinch, have come to us.

21990. The men have not come in a body and said: "We consider that such and such a Rule is irksome and unnecessary"?—No.

21991. It is only in individual cases that a man feels harshly treated and makes objection to the Rule?—Yes.

21992. Is there any particular Special Rule that the miners object to? Do you know of any Rule?—The main objection has hitherto been centred round the timbering.

21993. That is to say, they do not like to be in any way interfered with. Each collier considers that he has a right to put up what timber he pleases, and shall not be dictated to as to what he shall put up?—The complaint that has reached us oftenest is as to the conditions of putting up timbering where it has interfered very seriously with the ability to get coal.

21994. (*Mr. Ratcliffe Ellis.*) Too near the face?—Yes.

21995. (*Chairman.*) Do they object because it is too much trouble to put up the timber or because it interferes with their working?—Because it interferes with their working.

21996. To go on with this question of timbering, Mr. Ellis suggested that the question involved was simply a question of wages. In point of fact, is there not a question of safety involved? If these men are so ill-advised as to object to any systematic form of timbering, is it not time that some person was put in authority who should be himself responsible for timbering and see that proper timbering was put up, whatever the hewers might think?—I think I have stated that already: that an independent man is essential, because the individual at the working face is so anxious to get his darg, that is—his full day's work—that he is willing to risk something and grumble when he is interfered with.

21997. It is a question of safety, and not only a question of wages as to how far a working hewer at the face should be interfered with in the matter?—That is so.

21998. You are strongly of opinion in the interests of safety that he ought to be interfered with, and that some person should have authority to dictate to him what timber he should put up?—That is so.

21999. You say that the firemen should be placed in a more independent position?—Yes.

22000. What do you mean by "a more independent position"?—I might explain better by one case that come before me. I do not want to locate the time too closely, but it is less than five years ago. A fireman told me he was dismissed because he was in the habit of marking the book too frequently, and when the place was not safe of sending the men home. The management wanted the men to work, he alleged, and take a little risk. That man is still acting as fireman in a different colliery, and the conviction that we have is that the firemen should be independent enough to do their duty without fear or favour from the men or the employers.

22001. How would you manage that?—By having the Home Office or some other party who to some extent would be allowed to intervene in matters of this kind.

22002. That a fireman ought to be able to appeal from what he considered a wrongful dismissal; you mean something of that sort?—Yes.

22003. I understand some of the miners consider that it is extremely desirable that the firemen should in no way help the management in the general conduct of the mine, that is to say, that their duties ought to be entirely confined to looking after the safety of the mine, and that they ought not to have charge of the trams or anything of that sort, that they ought not to have the general conduct of the mine in any way. Their simple duty should be to see that all is safe and they ought to have nothing to do with regard to any of the suggestions made by the management, for getting more coal, or for working the mine at a greater profit. Nothing that has reference to money or wages or greater output ought to be within the jurisdiction of the fireman at all. They ought to do nothing with regard to the way the mine is conducted, except with a sole view to safeguarding the lives of the men?—In carrying out their statutory obligations they are compelled sometimes to send men home.

22004. That I understand. No doubt you cannot prevent the firemen having to do that occasionally and coming and getting into the bad books of the management, and, as the management considers, too frequently. That no doubt is a serious matter, about which I was not asking. I was asking about another point of the same character as to the duties of the fireman. We quite agree his duties are to send the men away from work, and that the management may object, and think that they are unnecessarily sent away, and the men also. It has been suggested to us that the firemen are sometimes appointed not only, and possibly not principally, with a view to the safety of the mine, but with a view to their being persons who could get the best work out of the men, and see that the mine was worked at its greatest possible profit. They have charge, for instance, of the trams, and see that the loading is what it should be, and they would perhaps report a man if he put in too much small coal, or something of that sort, which has nothing to do with safety, but only the management of the mine. That is the suggestion, I understand?—I believe in Ayrshire the pits are small, and firemen have varied duties. They are not onerous enough to simply allow them to confine themselves to their duties.

22005. You think in the small pits it is natural and proper that the firemen should not only look after the safety of the miners, but also bear some part in the general management of the mine?—That might be necessary in the case of a very small pit.

22006. With regard to inspection by the men under Rule 38, it was put to you by Mr. Ellis that the men in the mine themselves at work were the best men to make the inspection?—Yes.

22007. You said probably that might be so. I should like to put another view, whether it might not be advisable to send men down mines who had a much larger experience of the general conduct of business underground than the men who have worked in a particular pit all their lives Do you not think it advisable to have a workman who is extremely well qualified and has a first-class certificate and has possibly worked in other mines in Durham or other parts of the country, because he might, from his experience in other mines, be qualified to make suggestions that would never occur to a man who had only worked in a particular pit all his life?—The inference is in that direction, that he would be able to make suggestions that would conduce to safety.

22008. You might have a very superior man who would be better capable of conducting these examinations, although he had never been working in the particular pit in question. He might make better suggestions and be better fitted to carry out that examination than a man who had spent his whole life in the pit?—In admitting that the man with experience of that particular seam would have probably the best knowledge, I believe he would so far as danger was concerned, but the man with a wide experience might be able to suggest from his wider experience what was necessary.

22009. You would send two men down at a time?—Yes.

22010. One might be a man of general experience and the other a miner who had worked in that particular seam?—That is so; meantime we cannot do that according to law.

22011. You can according to law; there is nothing to prevent you according to law from authorising any working miner who has practical experience in mines going down any mines you please?—Who is working in the mine.

22012. No, in any mine. Anybody working in any mine in the United Kingdom can be sent down the mines by your men if they like to do it. That is the law, and it is just as well that you should know it, I think. You are under the impression that you cannot send a man to inspect for you under this Clause 38 unless he has been working in the actual pit?—That is so.

(*Chairman.*) That is not the law.

(*Dr. Haldane.*) Unless he is actually at work as a miner. Is that not the point? That was the point raised yesterday.

22013. (*Chairman.*) I understood Mr. Muir to say that it would be impossible to get a man of general experience even, although at the moment a working collier, because he had never worked in that particular pit?—That is my impression.

22014. You may take it that is not so. If you think it proper and desirable, you may send any working miner wherever he comes from down any of your pits. You would be satisfied with regard to the Special Rules with Mr. Ellis's suggestion that before a rule was put into operation it should be advertised, and that the men should have an opportunity of expressing their objections. It has been suggested that possibly something more might be done

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Mr. Peter Muir.

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with a view of bringing the masters and men together at an earlier period, and when the masters wish to advertise a rule, before advertising it and committing themselves to the proposition that in their opinion a rule was a good one, there should be a previous conference between the masters and the men, that is to say, the masters think a certain Special Rule should be put into operation and before advertising it to let the public know of that opinion, that they should take the men into their confidence and ask them previously what they think of it. Do you think that that would be an improvement?—I could not go the whole way of approving of that as an improvement. My feeling was that the thing should be submitted to the men after being arranged by the employers and the Home Office, and I thought there would be still a power to change it, but having committed themselves there would be more difficulty in making the change.

22015. That is my suggestion, that it might be as well to bring masters and men together for the consideration of Special Rules at the earliest possible moment?—That is so.

22016. (*Mr. Ratcliffe Ellis.*) With reference to the providing of baths at the collieries which you think would be a very desirable thing in the interests of the men, would you see any objection or do you suppose that the men would object to pay some small charge for the use of them, or is your idea that they should be provided at the expense of the coal owners?—I think the expense would be so trifling that it would be hardly worth making it an obstacle whether it was paid by the employer or by the men, or jointly.

22017. Do you see any objection to the men making a contribution in the way of a small charge?—I do not see any objection. My opinion is the cost would be so small that for the convenience and benefit nobody would think it worth while to make objections.

22018. Supposing they did, do you think the men would object if they used the baths? They would have the option of using them or not, but do you think that those who desired to use them would object to paying a small charge?—No, I do not.

22019. (*Mr. Smillie.*) Mr. Ellis put it to you that men employed in a mine were in a better position to make an examination under Rule 38 as compared with men who were not employed in the mine, and you agreed with him. Will you tell the Commission why that is so. Under the Mines Act a miner is not entitled to go into any part of the mine but his own working place, and if found outside he is guilty of a breach of the Special Rules?—Yes.

22020. How is he placed in a superior position to make an examination of that mine as compared with a person who works in another mine?—It was only because there is knowledge gained from his experience that I assented to it.

22021. His experience in his own working place you mean?—Yes.

22022. Miners generally in Ayrshire or Lanarkshire or any other part of Scotland have a general experience, of the various seams?—That is so.

22023. So that there is not a great deal in the fact that a person is employed in a particular mine to justify his appointment specially as an inspector for that mine?—No, the disadvantages on the other side outweigh that.

22024. In these inspections it is understood that an official of the mine must go round with the persons appointed as inspectors?—Yes.

22025. In order to point out every part of the mine to them?—That is so.

22026. I would like to emphasise the question of the baths and the benefit they would be. Many of your mines in Ayrshire are wet mines?—Yes.

22027. Men come up the pit at night drenched to the skin with water, and in many cases they have to travel a considerable distance home?—That is so.

22028. Do you think that is injurious to their health?—Most injurious, in the winter time especially. I have wondered, sometimes meeting them, how they survive it.

22029. From that point of view it would be a great benefit to the health of the miners to have some provision made?—Unmistakeably.

22030. You said that there were a few hundred single apartment houses you thought still in Ayrshire, but would there not be over 1,000 single-apartment houses in Ayrshire—I mean in the villages in which the miners live?—It would be difficult to give to an exactness the number, but I would be safe in stating that there are hundreds of single-apartment houses.

22031. Do you know any cases in the past few years in which employers have built up a passage and turned one single apartment into two apartments?—My experience rather goes the other way, where they have knocked down a partition.

22032. And made two single apartments into one?—Yes.

22033. You do not know any other cases where they have divided them?—None to my knowledge in Ayrshire.

22034. Do you know any cases in which they take in a lodger in the single apartment houses in order to help to pay?—That is quite common.

22035. Not only the lodger, but the family are in the single apartment?—Yes.

22036. As a matter of fact it must be a very trying duty on the part of the women where two or three sets of pit clothes have to be dried round a common fire?—That is unmistakeably so.

22037. That is a very regular thing at the present time?—That is so.

22038. As a matter of fact, you do not think there would be any real objection to paying if necessary a part of the expense?—I am simply giving it as my personal opinion, because that would be subject to the question being put before the men if it became part of a practical working out. My opinion is that I think it would be so infinitesimal that for the comforts and the benefits derived no single man would scruple.

22039. From a health point of view you think yourself that it would be worth any cost to the workmen or employers that was necessary?—Yes.

Mr. Robert Brown, called and examined.

Mr. Robert Brown.

22040. (*Mr. Smillie.*) You are Secretary of the Scottish Miners' Federation?—Yes.

22041. You have had a very long experience as a working miner in underground work?—Yes.

22042. Will you tell the Commission how many years you were working continuously underground?—31 years 3 months.

22043. In all classes of mining work?—Yes.

22044. Your experience in mining has not been confined to Midlothian?—Principally.

22045. You have been a miner in America?—Yes, I was in the States 20 months.

22046. (*Chairman.*) When were you last underground?—16 years ago.

22047. (*Mr. Smillie.*) Have you had any experience of other parts of Scotland or England?—No, principally in Mid and East Lothian.

22048. You have been in nearly every mining district in Scotland, attending meetings or dealing with disputes?—Yes.

22049. You know the Scottish miner fairly well?—Yes.

22050. Does your experience lead you to think that there is a very considerable want of discipline amongst the Scottish miners as compared with other miners in the country?—No, I cannot say it does.

22051. Do you think the Scottish miner is a fairly well trained person, not only in mining but in manners, as manners amongst miners go?—So far as I have been able to judge they compare favourably in all respects with other miners or other workmen.

22052. In intelligence and discipline, so far as their work underground is concerned?—Yes.

22053. I understand that you have had your attention called to the evidence given by the mines inspector in which he charges the Scottish miners with not being amenable to discipline?—That refers to Mr. Ronaldson.

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22054. That does not extend to Mid and East Lothian ?—No.

22055. Mr. McLaren is the chief inspector for the Mid and East Lothian District ?—Yes.

22056. Do you know if it is a common thing for the Miners' Association of Scotland to defend miners charged with a breach of the Coal Mines Regulation Act ?—No, we do not do it in our district ; at least I have never known of it being done.

22057. In your district ?—In our district.

22058. Are you aware whether it is a common thing in other districts ?—No. If any miner approached us and requested that we should protect him when he has been prosecuted for any breach of the Special Rules we usually investigate the case, and if we find in our opinion that he has been guilty of a breach of a Rule we do not protect him at all. We tell him he is entitled to be prosecuted.

22059. If you were of opinion that a person charged with a breach of the Coal Mines Regulation Act was clearly not guilty of it, and he was a member of your Association, you would not think that it was at all encouraging want of discipline to defend him in a case of that kind ?—We defended a case recently, and I was present in court where the man was charged with a breach of a rule in going into a pony trip. The man explained to me that he was in the lie, and there was a full trip and an empty trip and another pony trip being sent away, and he had to jump in to save being jambed, and immediately he leaped in the pony trip was taken off and the man was charged with a breach of the rule, and he had to do this to prevent himself being jambed. He got off, and it was held that he had only done that to save himself, and that it was not a breach of the rule.

22060. You defended in that case, and you felt justified in defending in a case of that kind ?—Yes.

22061. I notice you are of opinion that an additional staff of mines inspectors is required if we are to have a thorough inspection of the mines ?—I think it is requisite that the staff should be increased.

22062. Do you know to what extent inspection is carried on at the present time ?—Is there at the present time any systematic inspection of mines carried out in Scotland ?—So far as I am aware there is not. It is rather this : I feel when an accident takes place at a mine that they make an inspection of the parts where especially the accident has occurred, but I do not think that there is any systematic form of inspection.

22063. Was your 30 odd years underground spent chiefly in one or two collieries ?—No, I was in several collieries. I was in the shale works apart from the coal mines.

22064. Do you remember how many ins ectors you have seen underground in your experience ?—So far as my memory serves me I have only seen an inspector in the mine three times during all my experience.

22065. If a thorough inspection of the mine was being made during the time you were working there, you would have had a very good chance of seeing the inspector ?—Yes.

22066. Was a thorough inspection being made, as far as you know, upon those occasions when you have seen the inspector, or was he there because of an accident ?—Just because of an accident.

22067. On all three occasions ?—Yes.

22068. You never remember an inspection of a mine being made which you were working at ?—No.

22069. Your impression now is that the inspectors' duties, when they are inspecting, are chiefly concerned with accidents that have taken place ?—That is my impression.

22070. If their attention is called to any special danger you have no fault to find with their inspection ?—No. I think any time I have had occasion to call Mr. McLaren's attention to anything he has given attention to it very readily.

22071. You do not think that the present method of inspection is satisfactory ?—No.

22072. Chiefly because of the inability of the present staff of inspectors to inspect the mines ?—Yes.

22073. You propose that there shall be a considerable increase to the present staff of inspectors ?—Yes.

22074. Could you suggest to the Commission how many inspectors would be required, or how many men under ordinary conditions would be sufficient for an inspector to devote his whole time to the work ?—With regard to the present staff—I am speaking for the East of Scotland district, where we have three inspectors—I should think they should be trebled to make an inspection, say, once every four months.

22075–6. You would require three times as many inspectors for the East of Scotland division ?—Yes.

22077. The present inspection is not an inspection, but a sampling of the mines. Would you mean an inspection every four months to be the present kind of inspection ?—I have it from Mr. McLaren's report that they have inspected every mine in his district at least once. He says that it is an inspection. All I want is inspection, too. If he can do it once a year I want it done once every four months.

22078. (*Chairman.*) You are satisfied with the inspection as carried out by Mr. McLaren ; you are satisfied that the inspection he has made is the kind of inspection you desire ?—It all depends how he may define an inspection against my definition.

22079. What is your definition ?—My definition is that the whole of the mine should be inspected in every part. I do not know whether Mr. McLaren's definition goes that length or not. If it does then I agree with treble the number.

22080. If he and his assistants only make a partial inspection, you want more than three times the number of inspectors ?—Yes, if only a partial inspection, but he does not state so.

22081. (*Mr. Smillie.*) It is admitted by the inspectors that generally they only sample the collieries ?—Yes.

22082. They feel they are not supposed to make a thorough examination of all collieries. That would change your views as to the number ?—Certainly. I have his report and he states that they have made an examination of every mine during the twelve months, and some of the principal mines more so. I take it that was an inspection, but if it is only inspecting part, then it would take more than treble to make an examination every four months such as, I think, ought to be done.

22083. You have mines in which there are a considerable number of men employed ?—Yes.

22084. There are 500 in some cases ?—We have one colliery within six miles of Edinburgh in which, I think, there are over 1,000 men employed. It belongs to the Lothian Coal Company.

22085. Supposing the inspector was called to inspect where a fatal accident had taken place, and went straight there and came up again after an examination of that place, you would not call that an inspection according to your definition of what an inspection should be ?—No.

22086. If that is one of the inspections Mr. McLaren refers to, that is not an inspection according to your view ?—No.

22087. Would you still think if three inspectors at the present time have only managed for the first time, I think, for years, to reach all the mines under their jurisdiction and make a cursory examination of most of them, that three times the number would not be able to carry out an inspection every four months ?—No, they could not overtake the work.

22088. Do you think a thorough inspection of all mines is necessary every four months at least ?—Yes.

22089. Do you suggest that the staff of inspectors should be increased in order to enable them to do that ?—Yes.

22090. Is there any particular class of men you think should be appointed as assistant inspectors for that duty ?—I think that the men should have theoretical and practical knowledge combined. It would be a great benefit in that direction, and that they should have the practical experience to enable them to make a thorough inspection.

22091. Will you define "practical experience" ? Would that be covered by a person being a surveyor and down the colliery surveying once or twice a week for five years ?—No.

22092. That is not what you mean by practical experience ?—No.

22093. You mean practical experience either as a working miner or as a fireman or roadsman, or some other class of workman in the mine ?—What I mean by practical experience is that a man should have the experience by which he would gain some knowledge as to the nature of the roof and the coal to be worked, so as to be able to suggest improvements even in the working of the seams and other things to obviate accidents.

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22094. You are aware, at the present time, a person sitting for a manager's certificate or an under-manager's certificate must have had five years' experience underground —Yes.

22095. Are you aware that persons who have never had any experience of working underground are eligible for that examination?—I have known that men would put in their five years, and they have been in the pit during that period of time, but they have not had any practical experience, so far as I would define practical experience as a miner.

22096. Surveying daily two or three times a week covers that, and enables them to take their certificates?—Yes, and sometimes measuring up.

(*Mr. Ratcliffe Ellis.*) I do not agree with that view.

22097. (*Mr. Smillie.*) Do you want a new grade of assistant inspectors?—With regard to the experience that they gain now it has been within my knowledge that the custom in our district is that a young man will be engaged by a company; he will be five years there and will be down surveying, and they will utilise him to measure the places of the working man, and working forward in a colliery, keeping time, and other things, and putting in his five years, but that is not the experience I want. I want the same experience as I have had, to dig coal and to work at the coal face, practical experience, so that he will know something of the nature of the roof and the coal with a view to knowing the best means for safety in the production of the coal.

22098. You think that the Government should appoint a sufficient number of that class of inspectors to enable those examinations, which you have suggested, to be made?—Yes.

22099. Do you consider that they would be in the interests of safety underground?—Yes.

22100. You are of opinion that mines inspection, although it has not been adequate, has tended to greater safety underground?—I think it has.

22101. If it were removed, the probability is that the danger would be increased?—Yes.

22102. You believe that additional inspection would tend to still greater safety?—Yes.

22103. Inspection by men under General Rule 38 you are anxious should be so altered as to read that the men should have the right to appoint inspectors who were or had been practical working miners?—Yes.

22104. That would satisfy you?—Yes.

22105. That rule is not much taken advantage of at the present time?—No.

22106. You believe that it would be more taken advantage of if the men had the right to appoint persons who had been practical working miners?—Yes, I think it would.

22107. I notice that you are in favour of the officials who do the inspection on behalf of the company underground, that is the firemen, passing an examination as to competency before being employed as firemen?—Yes.

22108. May we take it that in your opinion the fireman is one of the most important positions about a mine?—Yes.

22109. The safety of the workmen is in the hands of the fireman to quite as great an extent, if not a greater extent, than the manager?—Yes. I think the fireman making an inspection in the morning is in the most important position with regard to the curtailment of accidents taking place, even more so than the mines inspector in the higher grade.

22110. A careful examination of the mine in the morning by a competent fireman tends to greater safety than inspection by Government inspectors?—Yes.

22111. And the best class of man should be secured for that who has a thorough practical and theoretical knowledge of their duties?—Yes.

22112. Have you any idea as to whether or not the districts which firemen have at the present time are too large for them to thoroughly make an examination of?—Yes, they have too large an area to cover in the morning to make a thorough examination of the roofs and sides of the travelling roads and the working places.

22113. Was it your own experience that the general examination in the morning by the fireman is an examination of the faces only, and not of all the roads leading to and from the faces?—My own opinion is simply this, and I am speaking of non-fiery districts, that it was simply going round with a piece of chalk in their hands and putting the date of the day of the month on the coal face.

22114. But not making a thorough examination?—No.

22115. I notice that you want some provision whereby men employed as firemen cannot be removed or dismissed from their employment by the manager before full enquiry has been made on behalf of the Home Office to show that the dismissal was justified. Why do you make such a proposal as that?—We wish to place the inspector in as independent a position as possible, so that he will have a real inspection and make a proper report.

22116. That is the fireman?—Yes, the fireman inspector.

22117. You want to place the fireman in an independent position in order that he can give an honest report on the condition of matters as he finds them?—Yes.

22118. Have you any reason to believe that is not done at the present time?—We have had several complaints from the men that it has been reported to them that the ventilation was all right, and the men, of course, in their own judgment, came to the conclusion that it was not as it should be to work in, and they would stop working and could not get up the shaft because the report of the fireman certified that the ventilation was good.

22119. Is it your opinion at the present time that many of the firemen are afraid to give a true report because of the danger of losing their position?—That is the feeling prevailing in the mining districts, that if the fireman gives a true report that was a means of stopping the colliery for a day it would be uncomfortable for him.

22120. That is the general feeling?—Yes.

22121. With regard to the Special Rules you think that in the drafting of Special Rules the workmen should have a voice?—Yes.

22122. Is that because the Special Rules are supposed to be for the safety of the workmen?—Yes. I think that he has even a greater interest than any other party in seeing that proper Special Rules are drafted for his own guidance and for carrying out the work.

22123. In the interest of safety and general comfort underground?—Yes.

22124. You think representatives of employers and workmen should meet together and discuss new rules before they are established?—Yes.

22125. Do you think if that were done and the employers' and workmen's representatives ultimately agreed on the rules, that they would be more likely to be carried out than if the workman had no voice in the drafting of them at all?—I think it would have a tendency in that direction.

22126. Do you, as a miners' agent, impress upon the workmen the necessity of carrying out the Special Rules and the Coal Mines Regulation Act?—Yes: whenever an opportunity arises for doing so I always impress upon them to observe the Special Rules in the interests of safety.

22127. You say where it is practicable that special men should be appointed for propping or timbering. Do you mean them to do the timbering or supervise the timbering being done by the workmen at the face?—Either that, or both.

22128. Would you have one system applicable to all the mines, or would you leave it open to have one or the other system, either that the employer appointed men to do the propping or men to supervise the doing of the propping?—In my own experience circumstances vary so much that I would leave it an open question as to how it could be carried out in a practical form. I understand in longwall workings where there may be a bad roof and a danger to work, there may be section walls, and men to supervise that section and to see to the roof and instruct the men to do it, and give general directions for the safety of the men.

22129. If any new mining legislation was established which took a part of the work at present performed by the miner off his shoulders and placed it on the shoulders of the men employed by the employer, the probability is that there would be a re-arrangement of prices. That has been the general experience of the mining community?—Yes; if there is a change in the nature of the work there is a change in the rates.

22130. You, as a leader, would not object to a re-arrangement taking place providing that the cause of the re-arrangement was the safety of the workmen?—No. We are dealing with re-arrangements every day.

22131. It would not be lessening the miners' wages. Supposing the propping was taken by the employer and an equivalent price taken off for the propping, it would not lessen the miner's wages; he would be enabled to produce rather more coal?—It would simply be a matter of adjustment.

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22132. That would be a matter for the workmen and the employer ?—Yes.

22133. It is sometimes said by miners that men working at the coal face are best able to do their own propping, because of their special knowledge of the working place. That is the general feeling of the miner, is it not ?—As a rule the miner prides himself on his own qualifications, and thinks he knows best. Sometimes they are so sure of that they are too confident.

22134. And very often they are so confident that they wait until a stone falls on them ?—Yes.

22135. Would the same experience not be gained by a man specially appointed to supervise the timbering, or do the timbering himself ? Would not he have more experience ultimately than the man working at the coal face ?—Yes, if specially appointed for that purpose, but there is another factor ; miners as a rule work at piece rates, and they will sometimes run risks through being in the face of danger continually. I have seen it in longwall workings where a considerable width is on either side of the road where the coal is put into the hutch. Taking it down away from the far-away end of the place they will allow the props to remain unset until they get all the coal down, so that it will make it easier work, whereas if the props were put up there is more difficulty in getting the coal down. If there was a man to see the props were put up he would insist upon it being done at the present time.

22136. You propose to abolish piecework and pay coal getters by the day ?—Yes.

22137. Are you of opinion that that would lessen considerably the number of accidents from falls of roof and sides ?—That is so.

22138. Are you of opinion that would do more than anything which legislation can do to prevent accidents ?—I think it would prevent quite a number of accidents at the coal face, and in our district some 68 per cent. of fatal accidents take place at the working face by falls of roof and sides.

22139. Many of the accidents which take place now at the working face are really the result of anxiety on the part of men to produce the day's work ?—Yes, and to keep pace with their neighbour.

22140. (*Chairman.*) Do you speak for your Federation when you suggest that piecework should be done away with, or is it only your own opinion ?—I understand that it is the opinion of the Scottish Federation.

22141. It is the opinion of the Scottish Federation, and you are speaking for the Federation when you say that ?—Yes.

22142. (*Mr. Smillie.*) You are in favour of every precaution being taken which experience can dictate so far as haulage is concerned, to prevent haulage accidents ?—Yes.

22143. You think where any method of preventing accidents has proved a success, that that should be incorporated in an Act of Parliament and should be made compulsory ?—Yes.

22144. With regard to certificates for engine-winders, do you think it would be an additional precaution in the interests of safety that engine-winders should have a certificate of competency ?—Yes, I think they should.

22145. Of course you have no fault to find with the general body of engine-winders in the country ; they are a steady, competent class of men ?—I think also that there should be two winding enginemen on every engine when men are being raised or lowered in the shaft.

22146. Many men may be in the shaft in your largest colliery at the same time ascending and descending ?—We may have 96 men on the two cages. I think I am right in saying it can be 48 on one cage, and if raising and lowering at the same time when the shift is changing, there may be 96 men in the shaft.

22147. (*Mr. F. L. Davis.*) Are there two decks ?—Yes ; they draw 12 hutches of coal in one cage at Lady Victoria.

22148. (*Mr. Smillie.*) Do you know if there is any mechanical appliance to stop the engine in the event of anything going wrong with the engine-winder ?—I do not think there is.

22149. You would be favourable to the compulsory adoption of any method which had been proved successful in stopping the engine in the event of anything going wrong with the engine-winder ?—I think any approved method for safety should be adopted by compulsion.

22150. You think that it will be more necessary in the future than in the past that two winding enginemen should be in the engine-house when men are raised or lowered, because of the increased number of men on the cage now ?—Yes, and the depth of the shaft, and the size of the engines ; anything may go wrong with the enginemen while these men are in the shaft.

22151. (*Mr. Ratcliffe Ellis.*) You have not been working down below for many years ?—Not for sixteen years.

22152. You have from time to time occasion to go down the mines now ?—I am never down now.

22153. Your information as to the present state of things is from what you are told ?—Yes.

22154. An inspector spoke very strongly of the want of discipline among the men. You do not agree with that altogether ; you think, from your experience of this place compared with other places, it is neither better nor worse than it is elsewhere ?—Quite so.

22155. With regard to Government inspection, do you think there is any one class of mine which it is less necessary to inspect than another ?—No, I think every mine should be inspected thoroughly.

22156. You do not think there is any difference between one and the other ?—No.

22157. Your view of an inspection is the examination of every part of a mine where the men are at work ?—Yes ; and also in other parts of the mine where men may not be at work, such as airways and aircourses.

22158. Take the mine you are speaking of, where 1,000 men are employed underground. Have you any idea of the area of the workings that would have to be inspected there ?—They extend to a considerable extent.

22159. What length of time do you think it would take one man to examine those workings in the way you think the examination ought to be made ?—I think it would take a man a week to examine the Lady Victoria pit as it should be done.

22160. Of course it would not be necessary for one man to do it ; two or three men might do it ?—I would prefer that one man should finish the examination of one pit.

22161. And it would take him a week to do that ?—Yes.

22162. If you took all the collieries in your district, how long would it take for this examination throughout the whole of the collieries ?—I dealt with the East Scotland District, where there were from 50,000 to 60,000—that is the district under the care of Mr. McLaren and his two assistants. In this pit you are dealing with there are about 1,000 men employed, so that if the same area had to be covered in proportion there would be about 50 times the same amount.

22163. If it took a week in that case, then you would want a year to make one examination ?—It would take a week to examine that mine thoroughly, I feel.

22164. And 50 times that would be about a year ?—Quite so.

22165. According to your examination, it would take one man 12 months to make a complete examination of the whole of the mines in your district ?—While it would take one man a week to examine a pit employing 1,000 men, it would not work out in proportion according to the number of men employed in the pit ; and we are only taking the number of men employed in the district under Mr. McLaren's charge. I can quite imagine a pit employing 200 or 300 men, and it would take only two or three days to do it thoroughly.

22166. It would take a long time to examine all the pits as you suggest ?—Yes.

22167. You think inspectors should be appointed sufficient in number to do that ?—Yes.

22168. Have you calculated whether one inspector to every 10,000 persons employed would be able to do it ?—I think one in every 10,000 could do it.

22169. Have you any idea how many it would require ?—It would not work out properly, taking the number of men employed, because there may be less or more in different mines ; and one mine with fewer men employed might be as difficult to examine as a mine with probably double the number. I will put it I think it should be done once every three or four months at the least, whatever number it should take to do it.

22170. You think that men qualifying for inspectors should be men of practical experience, and you want them to have scientific knowledge as well ; I think you put it

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theoretical knowledge ?—I take it our inspectors now have theoretical knowledge, and I would like practical knowledge to accompany it.

22171. Do you think there should be one man with practical knowledge and another with theoretical knowledge, or that one man should have both theoretical and practical knowledge ?—I think, with respect to any additional inspectors appointed, it would be to their advantage to have practical experience.

22172. Do I understand you would confine the office of an inspector to a person who had actually worked at the face, or as a workman in the mine ?—Yes, I think it should be confined to that—they should gain that experience.

22173. Now five years' experience with theoretical knowledge is sufficient for the manager, the man who has the sole responsibility of the mine ?—It may be sufficient so far as he is concerned ; it is not sufficient, in my opinion. I think even as a manager he would be all the better for having practical experience.

22174. Supposing a person has been in the habit of going down the mine every day, not merely surveying, but looking into the management, as, for instance, a fireman, does it matter what class he belongs to if he gets that experience ?—He cannot get the experience I want unless he has actually worked or been at work in the face.

22175. You come to the conclusion that a man must be a collier to qualify himself ?—He will be better qualified if he is.

22176. You think an inspector should be drawn from that class ?—In my opinion it would be advantageous in the view of safety.

22177. With reference to general rule 38, Mr. McLaren gave some reasons why the men do not make use of these inspections. He says at Q. 2604 : " Do those accidents not appeal to the men ? Do they not think they can do anything, by having their own inspection, so as to render those accidents less frequent ? (A). I think inspection by the workmen would have a good effect in that way, as it might help to keep things up to the mark. (Q). Apparently they do not think so themselves in your district ? (A). I do not know what they think, but as a matter of fact they do not make any inspection under general rule 38. (Q). You think they do not make any inspection because they seem to think the work is too hard ? (A). Well, I have spoken to several men, and they said they would not take £1 a day and do the work that one has to do in making an inspection—they have to crawl through the roadways and airways. (Q). Do you think any arrangement could be arrived at by which the men should be paid something in addition to their ordinary pay, so as to induce them to undertake work of that kind ? (A). I think if the Miners' Union would take the matter up and get it done systematically, and pay the men well, they would do it." Do you agree with that view ?—Not wholly.

22178. To some extent ?—I do not think the hardness of the work is what prevents the inspection being done at the instigation of the miners.

22179. You do not think it is not being properly renumerated prevents their doing it ?—No ; the renumeration has nothing to do with it.

22180. You think it is the risk of reprisals ?—Yes.

22181. Have you any reasonable ground for that ?—Only this, that when we have tried to put it in operation we could not get the men to undertake the duties simply from the fear that if they gave a correct report of their inspection perhaps the after-effects would not be pleasant.

22182. You have never had any experience that that was so ?—No ; but that is the reason the men give that they will not do it.

22183. What examination do you suggest the firemen should pass to obtain a certificate ?—I think they should be able to satisfy the examiners in a general way that they are capable of making an inspection of a mine.

22184. Do you suggest that the Home Office should conduct the examination ?—Someone at the instance of the Home office.

22185. I mean you suggest it should be a Home Office examination ?—Yes.

22186. You are on the Examination Board for your district ?—Yes.

22187. Do you think the examination for the second-class certificate would be sufficient ?—I should think it would.

22188. That if a man had a second-class certificate he should be qualified to act as a fireman ?—Yes.

22189. You think the districts are too large. Is that general, or is it only exceptional ?—It is general. The district apportioned to a fireman in our mines, that he has to go over in the morning, is so large that he has not time to do it and to make an examination of the sides and roadways and general safety of the place.

22190. That you have been aware of for some time ?—Yes.

22191. Have you made any representation to the inspector as to that ?—No ; we have been continually urging in that direction, that the inspection was not as it should be.

22192. You have not made any representation to the inspector ?—No.

22193. Have you made any representation to the manager of the mine ?—We never have an opportunity of approaching the management in that way. I do not think the managers would consider we had a right to approach them on that subject.

22194. You have a right to approach the inspector, at any rate ?—I understand we have been approaching someone in higher authority : we have been approaching the House of Commons, year in and year out, in that direction.

22195. But the person who is answerable is the inspector. You look to the inspector as a safeguard, to some extent ?—Yes. Then the inspectors come to the pit-head and see that the report is correct.

22196. You have never made any representation that the district is too large ?—I have not.

22197. Have you made any representation as to the qualifications of a fireman, and that you think the fireman are not properly qualified ?—No.

22198. What reason have you for thinking they are not properly qualified ?—They are not drawn from the ranks of the best workmen as a rule.

22199. Is that the only reason you have for supposing they are not properly qualified ?—From my own observation I have known they are not properly qualified. I have known men act as firemen who had no experience of working at the face at all.

22200. Acting as firemen ?—The district I am speaking of is a non-fiery district, and I am speaking more with regard to the roofs and sides and working faces—not for gas.

22201. These are exceptional cases in which you think the men are not competent ?—As a rule they are not competent for that work.

22202. As a rule the firemen, you think, are not competent to examine for the roof and sides ?—Yes.

22203. You think the firemen should not be dismissed except subject to the approval of the Home Office ?—Yes.

22204. The manager is responsible for appointing competent persons ?—Yes.

22205. If you take that responsibility from him and place it in the Home Office, would you relieve him from the responsibility of their default ?—No, they would still be in his employment.

22206. Although you deprive him of his right to send away a man who was not competent, you would make him responsible for the misdoings of a man he could not select ?—He is to have the selection, but he is to select from those men who have the qualification.

22207. Would the certificate be a sufficient qualification ?—The certificate is to certify that that man has passed an examination qualifying him to be a fireman.

22208. You want to take away from the employer a part of that right ; you want to say: " You may appoint a man, but you cannot dismiss him " ?—Yes. I want to take away that power.

22209. Still you leave the manager responsible ?—Yes.

22210. If he thought the fireman was not competent, you would still make him responsible if he neglected his duty, although you deprive him of the right to discharge an incompetent man ?—When he became aware that he was not competent he would apply to the proper authority to dismiss him.

22211. In the interim has he to be responsible to the manager if anything happens through his incompetence or neglect ?—If it was of such a glaring nature, then he would have to get a substitute and suspend the man for the time being.

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22212. You think that is an easy thing to do?—That is done in the case of municipalities at the present time with regard to medical officers and sanitary inspectors.

22213. You do not suggest there is any analogy between the danger to lives in pits and a sanitary inspector doing his duty?—Oh yes, there is a great danger of an outbreak of disease in such cases.

22214. But you really suggest there is any analogy between the two?—I think if a man is responsible for making an examination he should be in such a position that he can give a fair and honest report of what has come under his notice when he makes his examination; and he should not be removed from his position for giving that report unless it is an offence which can be taken as justifying his dismissal.

22215. If you are going to take from the manager the right to appoint a competent man, or discharge a competent man, is it fair to still leave upon him the responsibility for anything that the man may do which is wrong?—Yes.

22216-17. You really think it is fair?—Yes.

22218. As to the timbering, the best man is the collier, because he is there and he can see every minute the condition of the roof and sides in his place, and put up the timber if necessary; but you think he is apt to neglect that, because he wants to spend all the time he has got in getting his coal, and therefore, in order to guard against any mischief happening to him because he has not put up the timber, you transfer that responsibility to the manager to put the timbering up?—My view is that the miner ought to be the best party to know when timber is required and to put it up; but I would not relieve him of that duty altogether while a man was being appointed to supervise a section, and to see to the putting up of the timber—I think that the miner in the interests of his own safety would not work where he saw danger, and there would be another precaution in having a man to see that what he had neglected was done.

22219. Your view is this, that the putting up of the timber, whilst it should be done by the collier, should be more carefully supervised and scrutinised by the officials?—I would rather have it that a man was told off to see that a certain district was properly timbered.

22220. Your view is that although the collier should be answerable for the safety of his place there should be more supervision to see that he did what was necessary to keep the place safe?—When I say a man set apart to see it is done, I mean set apart to do it. A man should be appointed to do the timbering, and over and above that the miner, in the interests of his own safety, would do, in that man's absence, what he thought was required.

22221. At the present time the collier has to do the whole of the timbering?—Yes.

22222. That is included in his tonnage price?—Yes.

22223. Would you consider it right that if that work is taken from him and his time put at his disposal to get coal, a reduction should be made in his wages?—We will leave the coalowners to see to that.

22224. Do you say that should follow?—We are always very reasonable in this country, and wherever any rearrangement of the work takes place we try to discuss matters and come to a fair agreement.

22225. The reason for the change, I understand, is because the collier might be anxious to get as much coal as he could, and be disposed to neglect the necessary precautions for his safety?—Yes.

22226. You suggest that piecework should be abolished and the miners paid by the day or the week?—Yes.

22227. Would there be any security then for the miner getting a full quantity of coal?—I do not see any reason why the miner should object, any more than the men engaged in the mine, to work by the day and the week.

22228. Do not forget there are good and bad colliers?—Yes, the same as with respect to every other class of workman.

22229. When a man is paid by the ton it is to his interest to get as much coal as he can?—Yes.

22230. And it is to the interest of the employer?—Yes.

22231. You take away that inducement to a man to get a full quantity of coal?—I am prepared to admit that in the interests of safety if a man is paid by the day, instead of being paid by the ton or by the piece, the output sometimes may be a little less, but still I see where it would be a gain.

22232. But the output being less would be at the cost of the employer, because it would be his loss and not the workmen's loss?—It all depends upon the wages fixed.

22233. If the output of the pit is not maintained it cannot pay?—Quite so; but I can quite conceive where the output would be as great at the end of a period of time. For instance, if that mode of working prevented a man getting a broken leg, then he would not be absent in consequence of an accident, and the output would be as great at the end of the year because there would not be that delay.

22234. You think the output would be considerably reduced?—I do not think "considerably reduced," but it might be reduced.

22235. You suggest with reference to engine-winders that there should be two men at each engine?—During the time the men are being lowered.

22236. Do you think there might be a danger arising from the two men talking and neglecting their duty?—I do not think there would be so much danger from that as what may arise from the present system.

22237. What is the danger you want to guard against? Is it because a man may faint, or suddenly become incapacitated?—Yes.

22238. Does that often happen?—I cannot say it does, but the possibility is there, and so many men's lives being at stake, it directs our attention to what is likely to happen.

22239. This system has been going on for many years; and have you ever known an accident of that sort occurring? Remember that thousands and millions of men are taken up and down the shafts every year almost without an accident. Are you justified in anticipating that such an accident is likely to happen?—It is in anticipation that we want to direct attention to it. It is too late to wait until an accident occurs, and it is better to have a prevention than a cure.

22240. (*Mr. Enoch Edwards.*) What have the men who are appointed firemen been usually employed at previously?—Some may have been engaged working on the roadways as roadsmen, and sometimes they just come up from being pony-drivers and working in the employers' time until being capable, in the employers' opinion, of being a fireman.

22241. Is that the class they are drawn from chiefly?—Yes.

22242. It is rather a revelation to those who come from England, to be told that the firemen are almost exclusively taken from men who have not had practical experience of working at the face?—We call them firemen in our district, or inspectors. It is a non-fiery district, and their principal work is to inspect the roadways and faces before the men go to work in the morning. I think the strongest reason I can give that they are not drawn from the best class of men is that they are not paid as high a rate of wages as the other men who work at the face.

22243. The duty of the fireman is to see to the ventilation and to examine the working places?—Yes.

22244. You say that you think this class of men are invariably appointed from men who have had no experience at the coal face?—Invariably.

22245. Have you had much experience of men being fined for breaches of Rules?—Now and again I have complained of a part of a man's wages being stopped for something for which he has been blamed for doing in the pit; and of course if he submits to that then there is no prosecution.

22246. Have you been able to trace and find out in many cases whether there was any justification for those fines?—We have had cases where the men could prove they were not at fault, and we have asked that the money should be refunded where no prosecution has taken place. Sometimes I have found the manager was acting in good faith, but the information he got was wrong.

22247. That is to say the information is conveyed to the manager by some other official in the pit?—Yes.

22248. And whilst the other official reports the breach of a rule, the manager has the power to inflict a fine and decide the amount of the fine?—When a man goes for his wages he is told that so much is deducted for the offence, and then he can take what action he likes.

22249. You, in your Union, think that discipline is necessary?—I never miss an opportunity of insisting upon the Rules being observed by our men.

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22250. You do not think the method of enforcing discipline by fining the men is the best?—I do not think it is the proper remedy to prevent a similar occurrence.

22251. What would you do?—Whenever the manager fines a man at fault for a breach of a rule, let him be prosecuted in the Court, so that both sides can be heard.

22252. You suggest that practical men should be engaged for propping and timbering the roof. You mean by that men over the colliers getting the coal?—Yes.

22253. Have you heard that is largely the rule in the North of England?—I have heard that system prevails in some parts of England.

22254. And you say you would abolish piece-work and pay men by the day?—Yes.

22255. Have you yourself, or any members of your Federation, had any experience of the number of accidents where men were engaged by the day?—My experience—and I have been dealing with claims for compensation since the Compensation Act was introduced in 1897—is that we have a lower percentage of men paid by the day injured, in proportion to those engaged, than those working at the face.

22256. Much would depend upon the nature of his occupation?—Yes.

22257. Timbering roadways in done by day wage?—Yes.

22258. Are there not a great number of accidents in roadways through timbering?—Not in our districts.

22259. The returns would show it. All that is done by day wage?—Yes. We find that 68 per cent. of the accidents in our district take place at the working face by the falls of roof and sides.

22260. This is a phase of the question which has not come before the Commission hitherto, and I should like to put it to you. When you express that opinion does that convey the desire of the Scottish miners?—It has been before our district for a number of years, and I held that opinion years before I left working the coal myself. I have put it forward at our mass meetings time after time, and the men seem to approve and think it would be much better to be paid by the day or the week.

22261. You think that the men contracting in the pit would accept the position of day wage rather than work by contract?—Some men will object, but I think it is a general opinion that it would be much better. It is like everything else, that some men do not know what is to their advantage sometimes.

22262. Of course wages are much higher by contract sometimes?—As a rule.

22263. If we were arguing elsewhere we should say they were much higher?—Yes.

22264. It is rather new to be suggested here upon this Commission for the first time that the men are consenting parties and willing to work by day wage rather than by contract. The other aspect of it, whether some of them—especially those engaged outside getting coal—would want to put up the timber, is another matter; that is to say, the men work by contract, but the company undertake to do the timbering, as they do in the North of England?—I may say, with regard to the amount of money earned, it is generally understood in our district that while miners are engaged at so much per ton, and may make more sometimes than a man paid by the day, at the end of the year the man working under the company and paid in that way is earning the most money by the steady employment he has, and he is not subject to the fluctuations of want of work and such things.

22265. He is not engaged in getting coal?—I mean those getting coal. A man may make a greater wage to-day getting coal, and he cannot get work to-morrow. It is generally understood that a man engaged at a regular day wage paid by the company has more money at the end of the year than a man engaged on piece-work.

22266. He is working more time?—Yes, and steadier.

22267. He is found employment when the other is not?—Yes. The miner would have his day wage when he is in the mine the whole time, but now it happens that sometimes they are in the mine a whole day and only get half a day's work on piece-work.

22268. With reference to the certificates for firemen, of course, now the collieries are managed by the manager, the under-manager, the fireman, and so on, and the manager has a certificate and the fireman has not. You suggest the fireman should have a certificate to show he is competent to do the work?—Yes

22269. You prefer, whether he is a manager or otherwise, that he should have had some practical experience before he gets that certificate?—Yes.

22270. In making your computation about the increased number of inspectors, had you in your mind the Federation's Mines Regulation Bill?—I have had the Bill in my mind, but I think 10,000 is too big a number under certain circumstances for a man to undertake.

22271. If more districts are created, the present inspectors will be able to give more time to inspection and not have so much travelling?—Yes.

22272. You think it would be an advantage if there were more inspectors' districts created?—If there were more inspectors appointed, then, of course, they would be situate in the areas suitable, and they would have a shorter travelling distance to get to the mines.

22273. Is it necessary, do you think, that the assistant inspectors should undergo the same examination for their position as the present inspectors do?—Are you speaking of general inspectors?

22274. General inspectors.—I think they should have the same examination to pass.

22275. You do not favour the suggestion that there should be another class of inspector created, or of a more practical type, who could be in the colliery and get round the colliery?—I understand our inspectors are drawn largely at the present time from the ranks of the employés with a first-class certificate. If they had had so many years' real practical experience at the working face it would quality them still better for that duty.

22276. For any increase in the number of inspectors you would require the same high standard of examination?—Well, there might be grades—first, second, and third.

22277. Whatever practical knowledge he may have, you agree he should have a thorough theoretical knowledge?—Certainly.

22278. It has been suggested by many witnesses that there should be created a class of assistant inspectors at a lessened salary, to get round these collieries. You do not suggest that?—No.

22279. (*Mr. F. L. Davis.*) Your suggestion of abolishing piece work and paying day wage would entail curtailing the coal-getter's earnings, would it not?—Not to the same extent as it would have done some years ago. My experience is that there are more men being employed by the day than ever there were before. The introduction of coal-cutting machinery and contracting is prevailing to such a large extent that there are more men paid by day than there used to be a few years ago.

22280. Mr. Edwards put it that it is a new suggestion to the Commission, and it is surprising to me, judging from our part of the country; do you suggest that colliers, men working at the face, would earn as much, generally speaking, at day work as piece work?—It would depend upon what they had per piece or per day.

22281. I am talking about things as they are at the present time?—Some may earn more and some less. It works out as an average.

22282. You are proposing to penalise the good workman. The man who works well by piece work is to be penalised for the sake of his fellow-men who are not such good workmen?—It is in the interest of safety I make the suggestion. I hold, in all practical work, if miners were paid by the day there would be fewer acoidents. I must admit I have run a risk because I was on piece work, to get my quantity out, which I would not have run if I had known my day's wage was right at the end of it.

22283. I agree with you, that putting men on day wage instead of piece work would do more for safety than any legislation. I am inclined to agree, because a great many of the collieries would be shut up and there would not be half as many accidents as at the present time?—I do not dispute anything of that nature. It is well known what a man can produce in any seam. He is set what he is capable of doing, and I am sure the managers will look after those in their employ to see that they are looked after as well as possible.

22284. Before you settle a price list on a new seam, is it the custom to work on day work?—It has been done in some instances.

22285. Is there not a great difference in the earnings of the men once the price is fixed and it is piece work, compared with day work?—Not much, in my experience. In a new mine it is different. There may be some inducement

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to take care that the best conditions are made when they come to piece-work. If a system was adopted to be paid by the day, there would be no inducement to hang anything up.

22286. (*Dr. Haldane.*) Your contention was that the employment is more regular with a day wage than piece-work ?—Yes.

22287. Although the wage per shift is less, yet the total earnings will balance in the year ?—We look upon shift men as being the best paid men at the end of the time. They have steady employment.

22288. Your day's wage men ?—Yes ; we call it paid on shift in our district.

22289. (*Mr. F. L. Davis.*) Do you suggest that the work in your district is not regular ? It must be so if you put it in that way. You do not get full work ?—Many things happen during the day to prevent the miner getting full work.

22290. There are some districts I know where work is not so regular as others. Take a district where the work is regular ; then your point does not apply ?—It would not apply where a man is getting full work. I admit by piece he earns more money as a rule, while others, again, working by the piece, those below the average, do not earn as much as those paid by the day.

22291. I am much impressed by your evidence here with regard to the working men's inspection under Rule 38, and the firemen, that the men are afraid to do the workmen's inspection under Rule 38 because of their employers, and that the firemen are afraid to give a true report. Do you consider that the Scotchman is a more nervous gentleman than the Englishman ?—It is owing to the lack of nervousness. They are so cautious they will not run the risk.

22292. It strikes me that you are giving a bad character to your own countrymen. A man is paid wages for doing certain work, and yet he is afraid to do his duty ?—I say they are afraid to do their duty.

22293. Is there any other thing he is afraid of besides inspection and making a true report ?—I do not think he is afraid of the work. He is afraid of the result if he gave a correct report and threw the pit idle for a few days.

22294. I suppose it is the case if a mine manager appoints an incapable fireman, and this man is afraid to do his duty, still the manager is responsible ?—He is responsible.

22295. It is hardly reasonable for people to expect a manager will appoint incompetent men and afraid to do their duty, because he remains responsible all the time ?—Various things can be done for which a manager is responsible and it never comes to be investigated, and the men are suffering all the time. I have known men working with the ventilation such as they should not have worked in. If a report had been made of it the pit would have been idle. If the man had reported it he might not make another inspection.

22296. My experience is that the manager would be only too glad to know, so that he should not take undue risks. You have never known of a Scotchman being too nervous to take his wage in case the money was bad ?—No.

(*Mr. F. L. Davis.*) It is surprising, the fear of these men to do their duty. We have not heard of it from any other district.

22297. (*Mr. Smillie.*) You will hear it from South Wales before we have finished ?—I was at an enquiry in Wales about two years ago, where a fireman was in the witness-box who could not sign his name, and had to admit that the manager had to sign his report given verbally by him. An explosion had taken place, and the manager employed that man.

22298. (*Dr. Haldane.*) You spoke just now of the ventilation being bad in some mines and not put right. What was in the air, firedamp or black damp ?—The want of pure air. It was workable ; your light would still burn, but the miner knew it was not proper to be there.

22299. He felt something wrong with the air ?—Yes.

22300. Do you suppose that was black damp ?—Yes.

22301. It was not the heating of the coal, or anything of that sort, which is worse ?—No.

22302. Do you think that is a fairly common thing in districts you are acquainted with, having too much black damp in the air ?—Yes, and I have seen several complaints as to the want of fresh air to clear away powder smoke. They blast with ordinary powder in our districts, and the men complain they are working continuously in the powder smoke, and can hardly see what they are doing.

22303. You think the firemen often do not do their duty in reporting that ?—I do not think they do.

22304. Are you aware there is no very definite standard with regard to ventilation except with respect to firedamp in the air ?—Yes.

22305. You are of opinion that there are many other things besides fire damp to consider in the air ?—Yes. We have what we call white damp. The lamps burns very well, and the miners term it "white damp," while it is killing you all the time.

22306. Is that always associated with heating of the coal ?—Yes, and where there is a lot of blasting going on.

22307. You call that "white damp" too ?—It is called by some oxide.

22308. Yes, it is exactly the same thing, carbon monoxide. You have seen many cases of that ?—I have worked in it myself. We were driving a stone drift and our lamps burned, and we were unaware that it was going for us, and when we came to the fresh air we fell.

22309. You fell when you got to the fresh air. That is characteristic of carbon monoxide. I am not sure whether you were asked about provisions for changing clothes and washing ?—I did not make any suggestion in that way.

22310. Have you considered the question of the desirability of providing means for changing pit clothes and washing at the pit-head ?—I think that it would be a very good provision if that could be accomplished.

22311. You are clearly of opinion that it is desirable ?—Yes, it would be a great improvement to the homes of the miners.

22312. Have you ever seen that system carried out in any mines you have visited ?—The only place I saw it was in the States. We practised it to a small extent in a little pit I was in.

22313. That was a coal pit ?—Yes. It was not so much a custom established as that the working was wet. It would enable us to get changed before going into the cold.

22314. Are you aware it is the practice in the metalliferous mines in this country to provide a place for washing and leaving the pit clothes to dry ?—Yes. If I may state this, that matter was stated when we met our employers at the Conciliation Board in dealing with ankylostomiasis, and I think the chairman gave his opinion that he was favourable to some such system being adopted.

22315. No colliery has started it yet ?—I am not aware of it ; it may be with a few individuals. They may shift at the pit-head. That is all.

22316. Are you of opinion when the workings are dry that it is desirable to leave the dirty clothes and not bring them home ?—It would be a splendid institution if we had it.

22317. Do you suppose that the miners would be willing to pay something towards the cost if it was established ?—Our men are not against contributing to anything of that nature where we see the benefits. We have been discussing where the men have agreed to pay a penny a fortnight for an infirmary, which doubled the contribution from what it used to be, but knowing it was beneficial they did not mind. They are not against doing a thing when it is properly put before them. Scotchmen are not very bad when things are put before them.

22318. You have had no experience of foreigners ?—Yes, we have a number near here at Newbattle Colliery.

22319. Poles ?—Yes.

22320. They have come here ?—I believe there will be 150 or 200 Poles employed in the Lothian Coal Company's works.

22321. How did they come here ?—One or two got located there and they seemed to call for the others to come.

22322. Have you seen much of them personally ? Do you know many of them ?—I have had some experience through a number of them being injured, and, for their numbers, more get injured than our own people.

22323. Do you attribute that to their not knowing the language ?—Either that or not being practical miners when they are engaged.

22324. Being unskilled ?—Yes. My opinion is that some are very good workmen, those who have been miners before, but there are a number who have not been in a mine until they came here.

22325. Apart from their knowledge of the work, do you think they are fairly respectable men on the whole ?—We

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have two classes. There seems to be one class a little more respectable than the others, but there are a number of rows at Newton Grange, and a number taken to Court for fighting and brawling. They seem to have a great regard for Scotch after they come here.

22326. (*Mr. F. L. Davis.*) Do they brawl amongst themselves?—Mostly amongst themselves.

22327. (*Dr. Haldane.*) There is no disagreement with the miners or anybody else here?—Very little. They keep mostly amongst themselves. If they quarrel they usually take weapons to settle the difference, and that makes it worse.

22328. Do they all learn to speak English before they are here very long?—No, unfortunately I have had 10 or 12 deputations at our offices within the last two months, and only once one of the men could make me aware of what he wanted. I have to give them a letter to the delegate who knows what they are talking about.

22329. (*Mr. Ratcliffe Ellis.*) They are not much use, then, on a deputation?—They come and do their best, but they cannot make one understand what they want.

22330. (*Dr. Haldane.*) Supposing a fireman told them anything underground, they would often not understand?—No. I will give you a case that happened at New battle Colliery, where we had a Scotchman living at Dalkeith who was accompanied by one of the workmen to repair a road, and a fall took place and covered up the Scotchman. This foreigner ran off and passed two or three squads of men and they did not understand what was wrong, and this man was lying there for 2½ hours before they could get relief. He would have been better with a dog beside him.

22331. Are you of opinion it is a danger to employ men like that?—I think it is.

22332. (*Mr. Smillie.*) In what way is the manager held responsible for the misdeeds of the fireman? It has been said that the manager is held responsible for the misdeeds or mistakes of firemen, and I think you agreed that was so. I want to know where a manager was held responsible for the wrong-doing of a fireman he has appointed?—I understand that the fireman, being employed under the Statute, the manager may be responsible for damages at Common Law or under the Employers' Liability Act.

22333. That is what you meant?—Yes.

(*Mr. Ratcliffe Ellis.*) I mean this: under Section 50 of the Act, and there is a similar provision with regard to the Special Rules, the owner, agent or manager are responsible for every contravention of the rule by anybody, and can only relieve themselves by showing that they have to the best of their power used reasonable means to enforce the regulations. If it is shown that they have appointed an incompetent person they would not be relieved of their responsibility.

22334. (*Mr. Smillie.*) Supposing a fireman gets a hint from a manager—that is common in Scotland—that he is not to mark in the book anything that is wrong at the coal face and anything takes place as the result of his wrong-doing, is not the fireman prosecuted for that?—In that case it is the fireman.

22335. Would not the manager bring the Report Book to the Court if he was charged, and prove that it was the fireman who had signed the Report Book "Correct"?—Yes.

22336. (*Mr. Ratcliffe Ellis.*) Do you know any manager whom you think would do that, give a hint to the fireman to make an incorrect report and let the fireman be summoned and the manager escape at the expense of the fireman?—I have not known anyone so foolish as to let that be known.

22337. (*Mr. Smillie.*) As a matter of fact firemen are charged again and again with breaches of the Coal Mines Regulation Act?—Yes, sometimes at the instigation of the inspector of mines.

22338. The manager is not charged at all?—No.

22339. Mr. Ellis put it, did you know any case in which an engine-winder was suddenly taken ill, and you said no. Have you read Mr. McLaren's evidence at *Q.* 3325?—No.

22340. Have you known of cases of enginemen dying suddenly? He says: "I have known two cases in my district where that happened: they were small engines at a winding shaft. If that takes place at a small engine it might take place in a large engine?—That is possible.

22341. That is at least two cases in your district where that has taken place. You were asked whether or not you knew that there was a large number of your firemen whose districts were too large, and you said a considerable number of them were. Are you aware that Mr. McLaren at *Q.* 3388 was asked: "You say in your opinion there are too few firemen or deputies to undertake the work at the present time which you think they should undertake?" and his answer was:—(*A.*) "Yes, I think the duties are too large and the appointments too few"?—Yes.

22342 And in the second place that there is a necessity for an increased number of firemen being appointed? The Polish workmen in your district come from the West of Scotland generally?—I could not say where they come from.

22343. The reason I am putting this, it will be apparent to you, is that it has been stated repeatedly that Poles come from Russia and Poland, and that 95 per cent. or 96 per cent. of them have not been miners, and have never seen a mine till they come here. You stated in answer to Mr. Davis or Dr. Haldane that these who are experienced miners are very good workmen?—Yes.

22344. Do you mean those who have got their experience in Scotland and then come to your district, or before the came to Scotland at all?—I am dealing with those whom our men tell me are miners before they reach our district I do not know where they get their experience, but I understood that they had been miners before they left their own country.

22345. You are not aware that in the country from which the majority, nearly the whole of them, come, there is no mining at all?—I know that.

22346. Many of those men you speak of as being good miners may have come from the West of Scotland to your district?—It is quite possible.

22347. Do you think there is a large proportion of them charged with offences before the Sheriff?—There has been a number of cases from Newton Grange taken to Edinburgh and charged before the Sheriff.

22348. I do not mean ordinary offences?—No. My information is that there is not a very large number of these men working at the coal face; I mean only of those who are. A large number are employed by others. Contractors will take them on to lift the debris after it is taken down. They are working with a shovel more than with anything else.

22349. They do not interfere with the native here unless interfered with?—They seem to keep to themselves very much.

22350. (*Chairman.*) You say the firemen are not as a rule drawn from the best men, and you suggest that they should be paid higher wages to begin with?—I would not say from the best workmen.

22351. You need not be a good workman to be a good fireman?—I wish to put it that they are not drawn from the best practical workmen who have experience of the work.

22352. You also mean they are not the best persons to attend to such duties as a fireman has to?—I think not.

22353. Do you suggest that they should be paid higher wages?—If they were drawn from the better source they would command a higher wage.

22354. If bound to be certificated would they command a higher wage then, do you think?—I think so.

22355. I suppose it would be more difficult for a manager, if he dismissed a fireman because he gave what he chose to call an incorrect report which was not in point of fact incorrect, to dismiss a man if he was a certificated man in a certain position than an ordinary workman?—Yes, and I think if the Home Office held a veto against the fireman's dismissal we should be insured upon having a true report.

22356. That it should be illegal to dismiss him?—That they could not dismiss the fireman without giving good cause.

22357. That a fireman should be able to appeal against any dismissal, and that the manager would have to appear in court, if necessary, to justify his dismissal?—Yes.

22358. That is your theory?—Yes.

22359. That ought not to be the case with any ordinary workman. He should be able to dismiss him at his will and pleasure just as a workman could dismiss himself?—Yes.

22360. You think, as regards the fireman, that it ought to be one-sided, that a fireman ought to be able to say "I shall go whenever I choose, at a week, or at the ordinary notice," but the management, as long as they kept him

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in his position of fireman, ought not to be allowed to send him away. Supposing they want to send him away, they cannot do so. You mean to say that a fireman, once appointed a fireman, could not be dismissed from his position of fireman. He could not be relegated to a hewer again?—I think he should have a right of appeal. He has a responsible position to see to the safety of the men, and in performing his duties he can give offence to the managers, and if he thought it would reduce the output he might not do so. I want him to be in the same position as a sanitary inspector, and where he gives offence the Local Government Board holds a veto there.

22361. I do not mean that a manager should not be allowed to dismiss, but should not put him to any other work, for instance, send him back to be a hewer. For instance, he could not say, "I know some other man who ought to be made a fireman, I will not dismiss you, but send you back again to be a hewer." Could he not do that?—I think that would open the door to the same system which prevails now.

22362. Because when he was a hewer he might be dismissed as an ordinary hewer?—I think once a man holds a certificate to be a fireman and gets a situation from a manager, that manager ought not to have the power to dismiss him without the consent of some other power.

22363. Not only no power to dismiss, but no power to change his occupation?—No, that would be the same as dismissal, in my opinion.

22364. (*Mr. Ratcliffe Ellis.*) Would you suggest that the fireman should dismiss the manager?—No, I would not put anything so ridiculous before anybody.

22365. (*Dr. Haldane.*) You want to put the fireman in the same position as a medical officer of health, who has a right of appeal to the Local Government Board?—Yes.

22366. (*Mr. Ratcliffe Ellis.*) Is not that where they pay a part of his expenses?—They pay a small part of his fee.

22367. Would you suggest that the Home Office should pay a part of the firemen's expenses?—I would not object to them paying a small amount to get a right of veto.

22368. Would you also require that we should not dismiss the manager?—Whenever the manager commits a fault those who employ him will dismiss him.

(*Mr. Ratcliffe Ellis.*) Those people employ the fireman.

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22369. (*Chairman.*) Mr. Ellis suggests, if he was a certificated man, one mode of dealing with him might be that his certificate might be taken away. That might be a penalty for doing his duty badly. If his duties were not properly performed he might lose his certificate?—I am not thinking about a man being dismissed for not performing his duties properly. My theory is, that they would be dismissed for doing it properly.

22370. Mr Ellis suggests that there might be some safeguard in appointing a man as fireman who was certificated because, if he misbehaved himself, perhaps his certificate might be taken away. You would have a greater hold upon him than an ordinary man?—A case might occur where a man was justified in being removed. I am not against a man being punished for committing an offence.

22371. I was only asking you with regard to the certificate. With regard to the duties of fireman it has been suggested that too many duties are put upon the fireman, and it is desirable that he should only be concerned with matters connected with the health and safety of miners, and should not be permitted to be employed in any way merely affecting the pecuniary working of the mine, that the Manager should not be able to look to his pecuniary interest as regards the working of the mine to see that the man attended properly to the trams or loaded up properly, and that nothing that does not concern directly or indirectly the health and safety of the men should be the duty of the fireman?—The practice in our district is that the fireman makes an inspection in the morning and is engaged part of the day on the roadways doing repairing, and then he will take a run through the faces before the men quit. I want the fireman to make a proper inspection in the morning and look to his district as fireman inspecting the places during the day.

22372. He should not do anything but inspect the places?—I think it would be conducive to safety if tied down to inspecting properly.

22373. Do you consider it would be advisable or not that a fireman should be also a man who supervises the setting of timber, or would you have another man?—Part of that duty might devolve on the fireman. It would depend upon circumstances.

22374. If a fireman was a good timberman there is no reason why he should not be also timberman as well as fireman?—It would also depend upon the extent of the area that he had to cover.

Mr. MICHAEL KELLY, called and examined.

22375. (*Mr. Smillie.*) Are you a practical working miner?—Yes.

22376. How long have you been working in the pits? I should say over 39 years.

22377. Your experience is not confined to Lanarkshire; you have been in other mines besides the Lanarkshire mines?—Yes, I have been in Mid Lothian a short time and in America for a short time, in the coal mines.

22378. You have worked in quite a number of collieries in Lanarkshire?—Yes, and visited a number, not as a workman, but as a representative of the Lanarkshire Miners' Association.

22379. There is no seam worked in Lanarkshire in which you have not been employed or that you do not know, either from visiting or working in it?—I do not think there is. I know of none that I have not seen or worked in.

22380. Are you acquainted with the different kinds of mining, stoop and room, and longwall working?—Yes.

22381. You have worked at both kinds?—Yes, I worked a short time at longwall, but most of my time has been stooping, and in stoop and room.

22382. You have worked in seams of varied thickness?—Yes.

22383. From the thickest of our seams, 7 or 8 ft. thick. down to the thin seams?—Yes.

22384. So that it may be taken you have a thorough experience of mining?—I think so.

22385. I suppose your experience has given you a knowledge of what the duties of the various officials, the firemen, the roadsmen, the manager and others, are about the mines?—Yes.

22386. Are you a member of the Executive Committee of the Lanarkshire Miners Union?—I am.

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22387. And have been for a considerable number of years?—Yes, for about 10 years, I should say.

22388. While at the same time you have been a working miner?—Yes.

22389. Do you think that the districts for which firemen are responsible generally in our County at the present time are too large?—Some of them are undoubtedly very very large, too large for a fireman to efficiently do his duties. There are others I have experienced very small, where the fireman can easily do his duties and do them effectively, but a great many districts are undoubtedly very large in which a fireman has practically to run round.

22390. The size of the districts varies?—Yes.

22391. Has it been your experience that the firemen's duties are confined to looking after ventilation and the safety of the men at the face, or have they sometimes other duties to perform?—They have invariably to do that, and also to look after the driver and drawers, and to see that the work in what we call the cleek is carried on.

22392. In addition to their duties of examining the places in the morning and generally looking after the ventilation and safety of the mine at the working face, they almost invariably are expected to look after the pony drivers and the getting of the coals out from the men's faces?—That is so.

22393. That is sometimes considered by the management a very important part of the fireman's work?—Very often.

22394. Firemen are sometimes held responsible for getting the hutches out?—Yes. If the output is short for a day or two the firemen generally gets a wigging as to why more stuff has not been taken out.

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22395. If the output in the section does not come up to the ordinary amount fault is found with the fireman by the overman?—Yes; unless satisfactory reason is given fault is found with them.

22396. Are they very often engaged in laying down roadways?—Yes.

22397. And lifting roads?—Yes.

22398. And redding falls?—Yes; heaps of these things.

22399. Do you think it would tend to greater safety if the time of the fireman was entirely devoted to the ventilation and the propping of the working faces?—Undoubtedly I do.

22400. I suppose you will admit that some accidents, fatal and others, arise from either carelessness on the part of the miners or anxiety to get away their coals?—Anxiety more than carelessness, I should say, and the amount of duties firemen have to perform cause accidents as well. I do not know that I know of an accident occurring through sheer carelessness, but accidents occur in the hurry and excitement of work which requires to be done carefully, and that causes them.

22401. Do you know whether or not the very best class of men are always chosen as firemen, I mean from the practical point of view, and the point of view of thorough knowledge of the duties?—No, I know that they are not. I have known of men filling the position of firemen who had no experience whatever of work in a coal mine. I have known a man come from the surface and before he was three months in the coal pit he got the position of fireman, and he had never previously been down the coal pit.

22402. Was that in what we call a fiery mine, a close lamp mine, or a naked light pit?—I do not remember whether before the explosion which took place at Cadzow Colliery safety lamps were used or not, but that is the colliery I have in mind, and in which a man got employment as a fireman who had been a confectioner by trade and lived where I lived myself. I knew him from a boy, and he got a position in that colliery before he had left his trade as a confectioner three months. Before he had been three months in the coal mine he was a fireman.

22403. Whether or not that was a naked light colliery at that time, it has been a close light colliery for many years?—Yes.

22404. Because of a very serious explosion that took place?—Yes. I do not remember whether this man was a fireman in the colliery previous to the explosion or since.

22405. Has it been your experience that firemen sometimes were appointed not so much because of their competency or qualifications as because of favour on the part of the overman and manager?—There is a great deal of that done.

22406. Are there some collieries in Lanarkshire in which the firemen are very carefully trained by the employer, beginning as pony driver, then roadsman and up to the grade of fireman?—There are some such collieries.

22407. No fault can be found with these men, because they are thoroughly experienced?—Yes.

22408. Although often they have not worked at the face?—Often they have not worked at the face, but they have been through all the grades, what we call shift work, on cost work.

22409. Do you think that it would be an additional precaution in the appointment of a fireman if there was an examination and a certificate of competency?—Undoubtedly. I think a fireman holds a very responsible and onerous position, and that he should be a competent man.

22410. So far as the safety of the mine is concerned, you would consider the fireman at least equal to the manager so far as the responsibility is concerned?—Yes.

22411. Your employment is at present in what is called the fiery district and a close-lamp colliery?—Yes.

22412. Can you tell us from memory how often you have seen the Government Mines Inspector examining collieries?—I never in my lifetime as a miner recollect seeing a mines inspector in the part of the pit where I worked.

22413. You have never seen a mines inspector examining your place as part of the examination of a colliery?—Never.

22414. That applies to your whole 35 years' experience underground?—Thirty-nine. Of course the mines inspector has visited the colliery I have worked in many times, but he has never come to the part of the pit I was working in.

22415. Why do mines inspectors visit collieries?—Invariably after an accident.

22416. If their attention is called to any danger, they at once pay a visit?—Yes.

22417. How long have you worked in the colliery you are at present employed in, Earnock?—I should say 17 years.

22418. Continuously?—Continuously, without a break. I worked some years previous to that.

22419. You have been there 17 years without a break?—Yes.

22420. Have you known of any general inspection taking place in that colliery during that time by the mines inspector?—No.

22421. An inspection may have taken place on a day that you were not there?—That is so.

22422. You might have heard of it, supposing you had not seen one?—Yes.

22423. You have not heard of an inspection taking place?—Not a general inspection. I know an inspector has been there several times.

22424. That is a very well-managed colliery?—A very well-managed colliery, generally speaking.

22425. So far as ventilation and other matters are concerned, it is looked upon as a model colliery, practically?—Yes.

22426. There might not be so much occasion there for mines inspection as there is in other parts of Lanarkshire?—That is so.

22427. The usual method of inspection by the mines inspector, if an accident takes place, is that he goes down to the place at which the accident has taken place, makes enquiries and goes right to the pit bottom again?—That is so.

22428. If mines inspection was properly carried out there would require to be a considerable increase in the number of inspectors?—Yes.

22429. There is a question which none of our witnesses have dealt with yet, and that is the question of shot-firing. Are you aware that there are very strict rules regarding shot-firing in fiery mines?—Yes.

22430. In the Explosives Order and Coal Mines Regulation Act there are very strict rules?—Yes.

22431. It is understood in a close-lamp colliery that there should be sufficient shot-firers appointed for firing shots, specially competent persons. Are you aware that is so?—Yes, I am aware that is so. The rule invariably is that the fireman are told off to do the shot-firing.

22432. He might, of course, be the competent person under the Act?—Yes.

22433. That would be all right?—Yes, in addition to their other duties.

22434. Earnock was a well-managed colliery, you say?—Yes.

22435. May we take it what is applicable to Earnock might reasonably be applied to a worse-managed colliery?—Yes.

22436. It is not worse in any respects, so far as you know?—Certainly not. In a good many respects considerably better.

22437. Is there a very considerable amount of blasting at Earnock?—Yes.

22438. Who stems the shot?

(*Mr. Ratcliffe Ellis*) Are you speaking of the face?

22439. (*Mr. Smillie.*) The face?—The miners.

22440. They bore their own holes and stem their own shots?—Yes.

22441. Who carries the detonator?—The miner is served with it at the lamp station by the fireman in the mornings. He asks "How many shots have you to-day." and he may say one, two, three, or four, as the case may be, and give him as many detonators as he will have shots that day, and he carries them to the face with him.

22442. It is a high explosive that is used there?—Yes.

22443. What is the method of firing shots?—By electricity.

22444. What steps lead to the firing of the shot? The fireman is the shot-firer; what action does he take usually?—As a rule they have stated hours for going round, twice in the day for shot-firing, between 7 and 9, and very

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probably 12 till 2, and he takes the round of his district; he goes round the faces and shouts in to the miners he is passing "Let me have a shot; are you ready?" Sometimes they go in. Invariably the fireman goes in with his cable and connects his cable with the wire atttached to the detonator, and uncoils his cable and goes round the end of the stoop and puts his battery on the other end of the cable and fires the shot. But instances have occurred where firemen have not done that, but have shouted to the miner at the face to take one end of the cable and attach it to the shot while he was attaching the battery to the other end of the cable, and fatal accidents have occurred because of that. I have known of three fatal accidents occurring in that way, and one permanent injury; the man lost his hand, practically all of his fingers.

22445. In the Earnoch Colliery you remember that?—Yes.

22446. Three fatal accidents, and one man permanently disabled. Is that during the last 10 years?—Yes.

22447. That is one of the best managed collieries in Lanarkshire?—Yes.

22448. You have no idea at the present time what takes place in the worst managed collieries in Lanarkshire; from personal experience you do not know?—No. I have been making enquiries as to the method of shot-firing where safety lamps are in use, and where they are fired by electricity, and it is the same as I have described; the fireman serves out the detonators to the miners in the morning at the lamp station and they carry them to the face.

22449. The fireman is a competent person for shot-firing?—Yes.

22450. Those firemen, in addition to being shot-firers, have the ordinary duties of firemen, ordinary examinations to make, and they have to look after ventilation, and sometimes when they are shot-firing, may they not be called away to look after the hutches?—They are.

22451. They are sometimes called away even when engaged on duties as shot-firers?—That is so.

22452. To do what?—To look after the drivers where something may go wrong on the road. The driver runs to the fireman to get some assistance to put hutches on the rails, and for the time being he has to attend to the output.

22453. Is not the output usually looked upon as the most important thing?—Yes. It is no good carrying on the pit; in fact they will not carry on the pit if the output is going back. The output is the thing to carry on the pit for.

22454. That is the chief thing?—Yes.

22455. As a member of the Executive Committee of the Lanarkshire Miners' Federation you have heard from time to time complaints as to the condition of the mines in various parts of the county?—I have.

22456. Are you aware that some time ago the Lanarkshire miners decided to permit any branch of the Union to appoint examiners under Rule 38 of the Mines Act?—Yes.

22457. And that is now being largely taken advantage of?—There are a considerable number of branches who have taken advantage of it.

22458. Should I be right in saying that it has led to a considerable improvement in the condition of some of the mines?—We have heard so.

22459. You have heard that reported?—Yes.

22460. You have heard that officially reported from the miners' officials at the colliery?—Yes.

22461. There is nothing to prevent the miners at any mine in Lanarkshire appointing inspectors to make the inspection under Rule 38; so far as payment is concerned, that is guaranteed?—Yes, we guarantee the payment.

22462. The report comes to the Executive Committee as to the condition in which the mine is found?—Yes.

22463. Has there been any case in which fault has been found by the inspectors with the condition of the mine?—Yes, several.

22464. And the attention of the mines inspector has been called to those?—That is so.

22465. You do not know at the present time whether immediate attention has been given to them by the inspector?—I have not heard.

(*Chairman.*) How long have they been appointed?

(*Mr. Smillie.*) For the last 12 months almost. It is 12 months since we agreed to this.

22466. Do you remember a threatened strike at Dechmont Colliery?—Yes.

22467. I suppose you know that colliery well?—Yes.

22468. You are aware that it is a close-lamp district?—Yes.

22469. In what is known as the fiery zone of Lanarkshire?—Yes.

22470. Do you remember what the dispute was about?—The dispute was about the introduction of an improved lamp.

22471. An improved safety lamp?—Yes, which would be a great advantage over the lamps previously used in the colliery, both from the point of view of safety, the company alleged, and also a better light for the workmen while at work.

22472. Is it a pretty general thing for the workmen to pay a penny per day for the use of safety lamps at the collieries in Lanarkshire?—Some of them do, and some get free lamps.

22473. It is fairly general that there is a charge made of a penny a day?—Yes.

22474. For the use of lamp, oil and wick?—Yes.

(*Chairman.*) Do they not get the extra 2d. a ton for working with the lamps?

(*Mr. Smillie.*) In a naked light district, if they are forced because of danger to adopt safety lamps, they usually claim a penny per ton for a thick seam 4 or 5 or 6 ft., and 2d. a ton for 2 ft. to 2½ ft., and they almost invariably get it.

(*Mr. Ratcliffe Ellis.*) They have not to buy their candle?

22475. (*Mr. Smillie.*) No; it means about the same thing to the workmen. At Dechmont Colliery, where this strike was threatened, the workmen never have paid anything for the use of their lamps?—No charge whatever has been made.

22476. The employers introduced an improved lamp?—Yes.

22477. The general manager himself said it was an improved lamp?—That is so.

22478. That was proved to the Executive, that it was an improved lamp so far as the safety of the mine was concerned?—The workmen in the colliery admitted that it was.

22479. They admitted it was a better light, at least?—Yes.

22480. Did the employer wish to charge a certain amount per day for the use of that?—Yes.

22481. And the men refused to pay?—Yes.

22482. We were brought to the verge of a stoppage of 300 or 400 men about it?—We were.

22483. Do you remember the negotiation between the officials of the Union and the management, which ultimately prevented the strike, and we prevailed upon the management not to make the charge?—We endeavoured all we could, but we avoided a rupture by withdrawing the improved lamp.

22484. (*Mr. Ratcliffe Ellis.*) He withdrew the lamp and gave the men the old lamp?—Yes, without any charge, as formerly.

22485. (*Mr. Smillie.*) The dispute ultimately came to this, that one farthing per day would have been accepted by the company for the use of the lamp?—He would have taken the smallest fee providing the workmen had agreed to pay.

22486. The workmen declined to pay anything, having paid nothing previously?—Yes.

22487. The safer and better lamp was withdrawn?—Yes.

22488. That colliery is worked now with a lamp less safe than the lamp introduced?—Yes.

22489. In Earnock Colliery there is a considerable amount of mechanical haulage?—Yes.

22490. You do not know whether or not there has been any serious accident arising in connection with haulage?—There was one serious accident with a haulage incline heading. Precautions have been taken since. It was due to the breaking of a coupling. A tram of hutches, about 28 or 30, were going down a steep incline and a coupling

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broke near the end. The chain man stands on the last hutch down the brae, and when the coupling broke there was only one hutch left on the tram then, and it rebounded with such force that it broke his knee and permanently lamed him. Since that accident the company have introduced a safety chain which, in addition to the rope attached to the hutches, is attached to the last hutch and put on underneath the hutch ; it will probably take half of the number of hutches which is running in the tram, so that if a coupling broke in any of the hutches of the safety chain there are sufficient hutches on to prevent a rebound. If a coupling broke further on in the tram where the safety chain was attached, then the brake was in contact, and it was sufficiently strong to hold. No accident has occurred since they introduced the safety chain.

22491. Suppose the safety chain goes the whole length of 28 trams, from the first tram right back to the rope, that would prevent a rebound of the hutches, or the hutches running away in the case of a coupling breaking ?—Yes.

22492. Or a rebound to cause this injury ?—A rebound cannot take place with that safety arrangement, because the weight is sufficiently heavy to prevent it.

22493. Are you aware that a considerable number of accidents have taken place by reason of the breaking of couplings, or draw bars—generally, not in your colliery ?—Yes, generally.

22494. Do you think that it should be made compulsory by Act of Parliament that that wise precaution should be taken ?—It should. I am of opinion that the runaway points should be compulsory. A good many managers have taken that precaution and have runaway points, but others have not taken that precaution. I was called up a fortnight ago to Quarter Sessions in Edinburgh to give evidence in a case of a very serious accident that occurred because of the want of runaway points.

22495. Runaway points would have prevented that accident probably ?—They would have prevented it ; as a matter of fact I was informed that the management has put on the runaway points since the accident occurred.

22496. If they were compulsory they would have had them on before ?—Yes.

22497. I want to deal with a not very savoury point, as to which you are well qualified to give evidence, and that is the condition of the mines in Lanarkshire. Are they kept in a clean sanitary condition ?—No, they are not clean, and there is no keeping of them at all.

22498. Is there any attempt made to keep them in a clean and sanitary condition ?—None whatever.

22499. Am I correct in saying that you have seen in some of the mines, roadways where you could scarcely walk along for filth—human excrement ?—Yes, many times.

22500. For a distance of 20, 30 or 40 yards ?—Yes.

22501. The men use the bye-roads or disused roads for the purpose and no attempt is made to cover up the excrement ?—None whatever. I have known men sick and vomit several times with the stench and smell which was carried in from these things at times. Men have had to go home.

22502. It is not an uncommon thing for the men to be drinking the water which may be passing through those very places sometimes?—Some may do it. It is not common, because a large number of miners now carry water from the surface in pails, but there are many who have travelled a considerable distance from where they live to the colliery where they work who do not do that, and they have to resort to whatever they can get to quench their thirst.

22503. It is not an uncommon thing for some of the collieries to be infested with rats. There are hundreds and thousands of rats in some ?—Collieries are practically infested with rats now. As a matter of fact at the Earnock Colliery they employed a professional rat-catcher for some time to get rid of them.

22504. Do the rats in the pit sometimes give rise to a terrible state of matter which makes it almost impossible for the workmen to pass and re-pass ?—Yes, terrible.

22505. Is that one of the conditions where, if ankylostomiasis broke out, the temperature being favourable, a spread of that disease is bound to be rapid ?—I should fancy so.

22506. As far as you know, there is no colliery in Lanarkshire where there is any attempt made to put any place at the service of the workmen ?—I have never heard of any attempt being made anywhere.

22507. (*Mr. Ratcliffe Ellis.*) You say that you have visited many collieries in Lanarkshire ?—Yes.

22508. In what capacity ?—As a representative of the Lanarkshire miners.

22509. Under Rule 38 ?—No.

22510. In what capacity ?—We have had disputes about rates or drawing conditions between the workmen and the management. In order to thoroughly ascertain the conditions of employment, as to whether claims of our members were just or excessive, our Executive invariably send one or two of their members to visit the colliery in dispute, or the part in dispute, and examine the working conditions and report to the Executive, so that they would be in a better position to decide as to the merits of the men's claims

22511. You do that by permission of the management ?—Yes.

22512. Have you visited Baird's Collieries under Mr. Forgie's management ?—Yes.

22513. Have you ever inspected under Rule 38 ?—I have.

22514. Which colliery ?—Earnock Colliery, some years ago.

22515. That is where you were working yourself ?—Yes.

22516. Have you inspected more than once ?—Only once.

22517. In company with another miner ?—Yes.

22518. One who worked at the pit ?—Yes.

22519. How long did it take to do the work of inspection ? We did it in one day ; it was only one seam.

22520. What time would it take to make the same inspection of every pit ?—I should say it would take two men, if they visited the whole mine, at least a week.

22521. What sort of a report did you make ?—The seam that I and the man who accompanied me visited was the seam I happened to work in at the time, and we reported that we found everything correct. The occasion which led up to this inspection was a breakdown in the fan at the colliery at the time, and there was a rumour spread amongst the workmen that certain parts of the mine were fiery and that they were working under great danger, and this alarmed the men considerably, so that it resulted in a number of men being appointed to inspect the colliery. The colliery was laid idle on a given day to permit of this inspection, just to allay the fears.

22522. You and another man inspected your part, and other men other parts of the colliery ?—Yes.

22523. I suppose nobody could do that better than you men who worked there ?—I am not prepared to admit that.

22524. Could anybody do it better than you ?—I do not know that anybody could do it better, but certainly they could do it as well.

22525. Did you find any reprisals were made by the management for making this inspection ?—No.

22526. The management made no objection ?—No.

22527. You have not found yourself any worse than anybody else ?—No ; as a matter of fact the manager was very pleased that the inspection took place, because he was aware of the fear that the men were working under at the time, and he was also aware that there were no grounds for those fears, so that he was very pleased that this inspection took place.

22528. That inspection really had the effect of satisfying the men that these rumours were unfounded ?—Yes.

22529. With that object do you not think the men would be more satisfied by an inspection by their own members, by somebody working in the pit, than an outsider ?—No, I do not think they would.

22530. Were they satisfied after your inspection ?—They were.

22531. Everybody went to work again ?—Yes.

22532. As far as the result was concerned it could not have been more satisfactory whoever examined it ?—Not upon that occasion ?

22533. Do you think that there is a reasonable ground for a fear that if workmen engaged in a colliery other than the one they inspect, or some other colliery, if they had to make an unfavourable report, that they would suffer for it ?—Yes, there are grounds for fear.

22534. There is fear ?—Yes, and grounds for it.

22535. Have you known anybody who has suffered from making an unfavourable report ?—These are matters you cannot directly prove, because it is so easy to find excuses and reasons for dismissing workmen.

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22536. With reference to timbering, do you propose that timbering in the working places, which is now the duty of the collier or hewer, should now be transferred to somebody else?—I do.

22537. Do you think there is anybody more competent to do it than the collier himself?—Yes. I do not say that the miner is incompetent and cannot do it; he can do it; but just now that is not what he is paid for. He is paid for getting coal, and he intends putting timber in its place, but it is put off and put off until too late.

22538. I understand that exactly, but the rate he is paid includes the work of timbering?—Yes; in theory that is so.

22539. Although the miner can do it, yet he wants as much time as he can get to get coal, and neglects this work for safety?—Yes.

22540. You want to give him more time for getting coal and put the duty of timbering on somebody else?—Not exactly. If the duty of securing the working places is put on the owners, it would be a matter of readjusting rates.

22541. I understand that. You agree if the timbering was put upon the owners it would be necessary to adjust the field rates?—Yes.

22542. So that the miner, being relieved from that work, would have less field rate?—Precisely so.

22543. You think it would conduce to safety if that change were made?—I am absolutely certain.

22544. The ground of your belief is because the miner is tempted to put off doing it in order to get coal, and it is often too late, and then the mischief comes?—Yes, that is so.

22245. With reference to shot-firing, have you any suggestions to make in addition to the present regulation with reference to shot-firing?—I think the best solution of the shot-firing business would be that everywhere where safety lamps are used shot-firing should only take place during the night time.

22546. Or when the men are not at work?—Yes. At Dixon's Colliery, at Blantyre, since the big explosion about 30 years ago that system of shot-firing has been in operation That is a colliery including four pits. Some of the seams are large seams and no shots are fired while the men are at work, and an accident has never occurred during the last 30 years in that colliery.

22547. Your view is that where lamps are used and not naked lights, the shot-firing should be done between the working shifts?—Yes.

22548. You said, if I understood you aright, that the present practice at your pit is that the detonators are given to the collier?—I do not refer to the colliery where I work. I say that is the general rule.

22549. At the colliery you work what is the rule?—That is the rule.

22550. To give the detonators to the collier?—Yes.

22551. Do you know the regulation in the Explosives Order?—I do.

22552. That detonators shall not be used or taken for purposes of use into any mine unless the following conditions are observed. "Detonators shall be under the control of the owner, agent, or manager of the mine, or some person specially appointed in writing by the owner, agent, or manager for the purpose, and shall be issued only to shot-firers or other persons specially authorised by the owner, agent, or manager in writing." That obligation is not carried out?—According to my reading of it it is not carried out.

22553. Are colliers instructed to fire their own shots? The shots are fired by the firemen?—Yes.

22554. What is the object of giving the detonator to the collier?—To save time. If a miner charges and stems his own shot and has everything ready, the shot-firer, who is invariaby the fireman, has only to run round.

22555. That does not seem to be in accordance with this regulation?—You can take it from me that it is the invariable method.

22556. There is another thing: "Where the charge is fired by an electrical apparatus the shot-firer shall not use a cable for the purpose which is less than 20 yards in length. He shall himself couple up the cable to the charge and shall do so before coupling the cable to the firing apparatus." In the particular case you mention that regulation was not observed?—No.

22557. The fireman who asked the collier in that case to couple up his cable with the shot—did you know that fireman pretty well?—Yes.

22558. How long had he been a fireman?—He had been a fireman for years.

22559. Did you know him before he was a fireman?—No, I do not think I did. He was a fireman when I knew him first.

22560. You do not know what rank he had been drawn from?—No.

22561. (*Mr. Enoch Edwards.*) He was not the confectioner?—No.

22562. (*Mr. Ratcliffe Ellis.*) That fireman, you suppose, was a competent man?—I do not know. I would not put him down as an incompetent man.

22563. He was careless upon that occasion?—I do not know that it was carelessness, either. The man had too much work to do.

22564. Because the man had too much to do was the reason this mishap took place?—Yes.

22565. Can you give me the name of the confectioner who was a fireman afterwards?—I do not remember his Christian name, but Walker was his surname.

22566. How long is it since this took place?—This is long over 20 years ago.

22567. You have not known anything of the sort during the last 20 years?—No, but I heard of a case probably six or seven years ago. I have no knowledge of it. I know of a case of a policeman who became a fireman.

22568. Do you think it would be an advantage if there was a regulation that there should be no shots fired in the haulage roads unless under the immediate direction of the manager?—Very seldom, if ever, are there shots fired in the haulage roads, and when they are it is usually between the shifts.

22569. Whether between the shifts or not, do you think the manager ought to authorise the firing of shots in the haulage roads?—Certainly.

22570. Do you think there should be any further regulation than exists with regard to the stemming of the shot?—I do.

22571. You think they might be detailed a little more?—Yes.

22572. So as to secure that the shot is properly stemmed?—Yes.

22573. Do you think that there should be any further regulation with regard to the drilling?—No, I think that is perfectly safe.

22574. The stemming ought to be more provided for?—Yes.

22575. Can you suggest in what way you think there should be an addition?—I think the authorised shot-firer should be the stemmer—the person to stem the hole—and not the miner.

22576. That is often the case in England, but apparently not the case in this country?—That is the reason they serve them to the miner, so that they may get every thing ready.

22577. With reference to the haulage, you think anything that would conduce to preventing tubs running away, or minimising the mischief when they do run away, would be a very desirable improvement?—Runaway points, in my opinion, are a very necessary precaution to take, and I think mine-owners should be compelled by law to provide some such precaution.

22578. (*Mr. Enoch Edwards.*) What class of men are the firemen generally drawn from, and what are they before they become firemen?—Some of them do a little driving, and some of them get on as roadsmen.

22579. What do you mean by "driving"?—Pony driving—tramming, I believe you call it.

22580. And some of them roadsmen?—Yes.

22581. The policeman you referred to might have belonged to a fire brigade before?—I do not know what he belonged to.

22582. I mean that would be a sort of qualification for a fireman. You do not think there is much of that, after all, in Scotland, where they appoint a man so thoroughly inexperienced?—There is not much of that.

22583. Is the colliery you work at a fairly average well-managed colliery?—It is.

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Mr. Michael Kelly.

12 June 1907

22584. Would it be correct to say that the firing of these shots in the method they are now fired by the fireman is done with the knowledge of the manager in that colliery?—The method is known to the manager.

22585. The manager knows what is going on?—Yes. Of course a manager would never anticipate that a fireman would ever ask the miner to take one end of the cable and couple it on to his shot. The fireman who was guilty of that was dismissed by him at once.

22586. So that is not done at your colliery?—No. I have only instanced the four accidents that occurred because of that being done.

22587. But not recently?—No. A number of Poles are employed in that colliery, and I was told that the Poles, who were so very very anxious to please the fireman, when they heard him shouting ran out and met him and took one end of the cable. They it was, I believe, who voluntarily did this themselves before ever a fireman thought of allowing a miner to do it.

22588. You do not suggest that they do that sort of thing at your colliery now?—No; but the method lends itself to its being done. It may be done any time because of the present method of the detonators being served to the miners.

22589. So far as you know it is not practised in that form at your colliery?—It is not.

22590. But the method of handing these things to the colliers lends itself to it?—Yes.

22591. I understand the reason why you say that is because the district is too big?—Yes.

22592. You think it could be met by the appointment of an additional fireman?—Yes.

22593. Is this colliery a gassy colliery?—No.

22594. You use lamps?—Yes.

22595. And only permitted explosives?—Permitted explosives.

22596. You have considerable knowledge of other collieries besides where you work. What is your experience as to the scarcity of firemen at these collieries? Are there more collieries where there is a lack of firemen and they cannot do the work?—That is to say an insufficient number. It is a common complaint of firemen that their district is too big and their work is too heavy.

22597. Can you tell us what is the qualification for a fireman?—I do not know that there is any qualification more than a desire to get such a job.

22598. There is no standard set up?—No standard.

22599. So that it is quite open to appoint anyone as fireman?—Yes.

22600. Does the manager appoint them?—I am not aware whether the overman or manager appoints them. I should be inclined to think it would be the manager.

22601. It would be more likely to be the manager?—Yes, but I do not know from my own knowledge.

22602. Would you think that the manager was not carrying out his duty if he appointed someone who was not qualified?—I would, indeed.

22603. The fireman is more in direct touch with all the elements of safety in a pit than anyone else in it?—That is so.

22604. With reference to timbering, I gather you have had long experience in pits in Scotland and elsewhere, and you think that if the company undertook to do the timbering it would lead to greater safety?—Undoubtedly.

22605. Do you think it would be practically possible for a collier, say, you and your mates, to work on a place by contract and the company find men to do the timbering?—Yes.

22606. Is it necessary at times that a prop should be set rather hastily?—That is so.

22607. Would you suggest that in every working place the company should keep a man to set timber?—That would not be necessary.

22608. We are a bit anxious to get the practical side of this, and we want you to tell us how we can do it, if it is a good thing. Are you aware of the methods of timbering in the North of England?—I have been informed that the miners are not asked to do the timbering in the North of England.

22609. The deputies do it?—Yes. As a matter of fact we know a number of North of England miners who come down here cannot do it, and they know nothing at all about it.

22610. But in the absence of the deputy the men ought to timber for themselves?—Yes.

22611. You think that would be practical in Scotland?—Yes. Just now in the bigger seams where stooping is involved, more often than otherwise the timbers at the disposal of the men do not fit, they are too long. The floors and the roofs are gradually getting nearer to each other, and posts that would be of a proper length to-day would probably be three or four inches too long to-morrow. The miners' great difficulty is in failing to get timber the proper length, particularly for the stoop.

22612. Do you work the coal longwall?—No, stoop and room.

22613. You are not confusing spragging coal with timbering?—No. Some of the seams are worked longwall.

22614. And the sprags would have to be set by the men working longwall?—Yes.

22615. What you are referring to is the timbering in the roof?—Yes, in the roof.

22616. (*Chairman.*) Have you a first or second-class certificate?—No certificate whatever.

22617. Have many of your mates in the mine working with you certificates?—Yes, a considerable number of miners now have first and second-class certificates.

22618. (*Mr. Enoch Edwards.*) I suppose you have never sat for one?—I have never sat for one.

22619. (*Dr. Haldane.*) Do you think it would be quite practicable in Scotland for the company to do the timbering? Would there not arise delays in the work from no one being present to set the timber at the right time?—I do not think there would be many delays. As a matter of fact if a miner felt there was a necessity for a prop being put up, and there was not a man to put it up, he would put it up. One of the things I have noticed, in a number of pits in Lanarkshire, is that the overman or manager who generally accompanies him invariably in almost every place they go in have to complain of the miners not having their places properly timbered, and certainly not in accordance with the timbering rules. As a matter of fact, managers cannot afford to enforce the timbering rules, because the men tell them they are not paid for it, the rates are so small, and so on. Only one instance have I noticed where a manager has sent a workman home for want of having his place wooded and spragged because there were no props for him. He told the manager there were no props, and the manager said, "Well you will go home—you have no right to be there, supposing you have no props," and the manager told the overman never to let this occur again; and he told the miner, "Next time I get you in this way I will prosecute you." In all the other cases they warn the men, and the men say, "Well, we are going to put them up, but we have not time just now, we are too busy getting the hutches."

22620. (*Mr. Ratcliffe Ellis.*) If a man's place is not properly timbered, in accordance with the Act of Parliament and the Rules, he is not allowed to stop there?—Quite so.

22621. (*Dr. Haldane.*) With regard to the question of sanitation in Lanarkshire, are the mines you referred to as being dirty also hot or warm?—Some of them are very warm.

22622. Warm so as to make you sweat?—Yes, without working at all some of them make you sweat.

22623. Are any of them wet as well?—Yes, wet and hot.

22624. What district are you referring to now?—I am referring to the Blantyre District and the Burnbank District. There are some of the mines there very hot.

22625. Deep mines, I suppose?—Well, ordinary.

22626. Would they be 500 yards deep?—No, about 200 yards.

22627. And still very hot?—Yes.

22628. How is it they are so hot?—I think it is coming out of the waste workings; some of it is due to steam. The haulage underground is worked by steam, and some of the heat is caused by steam.

22629. Do the steam pipes come down the downcast shaft and warm the air that is going into the mine?—Some of the steam pipes are carried from the bottom along the main intake roads.

22630. (*Mr. F. L. Davis.*) Are the boilers underground or on the surface?—The boilers would be on the surface. It is the steam pipe.

22631. (*Dr. Haldane.*) You think that is one of the main causes of the heat in these shallow mines?—Yes.

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22632. Generally a shallow mine is not hot?—I know that. One of the causes is that the heat comes out of the mineral somehow when the drift closes and the men are endeavouring to get the coal closed in by the drift—and in some cases the coal is so hot that you can scarcely hold it in your hand.

22633. That is working stoop and room?—Yes.

22634. I quite understand in that way you get mines that are both hot and damp?—Yes.

22635. I think you have worked in America for a time?—Yes, for a short time.

22636. In the mines at which you worked had they any facilities for washing at the surface at the pithead, and changing their clothes?—No.

22637. You have never seen that system carried out?—No; but at all the other works—ironworks and steelworks—in America, they have the means of washing.

22638. Are you of opinion that it would be desirable to have arrangements of that sort at the top of each pit?—Yes, it would be very very desirable, and a great improvement.

22639. You think that the men would be in favour of it?—Yes.

22640. Of course it causes some delay in getting home and there is something against it, perhaps, from that point of view?—Yes, but it has the advantages that you are going clean into your own home, and you are not taking filth with you as you do at present.

22641. You think from that point of view it would be desirable?—Yes, very very desirable. A considerable number of the coal-owners in Lanarkshire have a large number of their workmen housed in their own houses, and the sanitary conditions are very very much below what they are with respect to other property. The sanitary conditions about the miners' homes are very primitive indeed.

22642. You mean there are not proper conveniences?—None—no proper conveniences.

22643. No water-closets, for instance?—No.

22644. Have they just out-of-door arrangements?—Yes, common ashpits.

22645. No proper drains?—No.

22646. Are there means for regularly taking away the stuff from these ash-pits?—Just when the heap gets so large that the structure for holding it is getting congested and sometimes a few weeks elapse before the removal.

22647. That is hardly a matter for this Commission; it would be a question for the Medical Officer of Health?—You see the relation between the two. Where conveniences are so very very bad for the miners at their homes it necessitates much more of that being done in the coal mine than would be done if proper facilities were given.

22648. Is there a good supply of conveniences usually at the pit-head or about the pit-head?—There is not.

22649. That is not the custom?—No; there is usually a large dirt bin, and as a rule the workmen about the pit-top go away out to that dirt bin.

22650. (*Mr. Smillie.*) Are there any females employed at the pit bank at your colliery?—Yes.

22651. What number?—I should say about a dozen.

22652. Are there females employed at other collieries around Earnock and the Hamilton district?—I know there are at Blantyre and Hamilton.

22653. There are hundreds employed altogether within some miles?—Yes, round Bothwell.

22654. Do you know whether there are any conveniences for the women at the pit banks?—There is a little wooden structure at Earnock; I do not know about other collieries.

22655. Do you think that the employment of women at the pit bank is a desirable thing from a moral or physical point of view?—It is not.

22656. (*Chairman.*) Do I understand you to say that to your knowledge throughout Scotland at present it is the custom for the management to issue detonators to workmen?—Not the management; the firemen, who are specially appointed shot-firers, get the detonators after going round their district and examining their district before the workmen descend the pit in the morning. They have a lamp cabin, and they keep the detonators there in a box; and at that lamp station when the fireman is examining each miner's lamp, he asks them how many detonators they want, and each is served with the number he asks for.

22657. The management know that is the practice, I suppose?—Yes.

22658. So that the management allow these firemen to issue detonators to ordinary workmen, and they allow those detonators to be handled by ordinary workmen?—Yes.

22659. That is a contravention of the rule under the Explosives Order, which says "Detonators shall be under the control of the owner, agent, or manager of the mine, or some persons specially appointed in writing by the owner, agent, or manager for the purpose, and shall be issued only to shot-firers or other persons specially authorised by the owner, agent, or manager in writing." The manager would not be justified in allowing him, if he knows about it, to issue a detonator to an ordinary miner?—Not only the manager must know of it, but the mines inspector must know of it in Scotland.

22660. Do you say the mines inspector must know of it?—Yes, he must know it.

22661. It is a strange thing. This order has been in force ten years, and we have not had a single word from a mines inspector telling us that it has been infringed. It seems to me to be a clear infringement. I do not know whether the mines inspectors read the order in this way, that so long as the management give out these detonators to the authorised person, then the authorised person may do what he likes. But I cannot read it in that way. It says "shall be issued only to shot-firers or other persons specially authorised." The manager might say it was issued in accordance with that Order to the fireman, who was the person specially authorised, and what he did with it has nothing to do with him. But I should not think that could be the reading of it. It does not specially say that no one but shot-firers might handle it; but that surely would be the corollary, I should think?—Well, it is done.

22662. The next rule says; "Shot-firers and other authorised persons shall keep all detonators issued to them until about to be used in a securely locked case or box separate from any other explosive"?—That is what the rule says.

22663. (*Mr. Ratcliffe Ellis.*) I understand from you that the fireman hands it over to you when he gives you a lamp?—Yes, in the morning.

22664. That is a long time before the detonator is going to be used?—Yes.

22665-6. (*Chairman.*) It seems to be an extraordinary thing that this Explosive Order should have been in force ten years, that the mines inspectors seem to think it is all right, and that a fireman should be allowed to issue these detonators at the beginning of the work with the lamps?—Well, it is so.

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THIRTY-FOURTH DAY.

Thursday, 13th June, 1907.

At Edinburgh.

PRESENT

Lord MONKSWELL (*Chairman*).

F. L. DAVIS, Esq.
ENOCH EDWARDS, Esq., M.P.
THOMAS RATCLIFFE ELLIS, Esq.
JOHN SCOTT HALDANE, Esq., F.R.S.
ROBERT SMILLIE, Esq.
S. W. HARRIS, Esq. (*Secretary.*)

Mr. JOHN WILSON, called and examined.

Mr. John Wilson.
13 June 1907

22668. (*Mr. Smillie.*) Are you a miners' Agent?—Yes.

22669. You are prepared to give evidence to this Commission as representing the Scottish Shale Miners and West Lothian Coal Miners?—That is so, but I give evidence to-day chiefly for the Scottish Shale Miners.

22670. Your practical experience as a miner is confined chiefly to shale mining?—Mostly, although as a young man I have got both coal and iron stone.

22671. You have a considerable amount of shot-firing in the getting of shale?—A great deal.

22672. Far more so than in getting coal?—I should say much more than in the getting of coal.

22673. Are there many accidents arising from shot-firing?—We have several every year.

22674. Do the workmen generally fire their own shots?—That is so.

22675. Are there any shale mines which at the present time are being worked with safety lamps?—Not to my knowledge.

22676. There have been explosions of gas in some of the shale mines?—There have. In some of the districts there are generally one or two every year.

22677. You propose that the rules with regard to shot-firing should be so rearranged that miners should not go back upon a shot which had missfired until the following morning?—We discussed that on Saturday last with the shale miners' officials, and they think that is a wise precaution with respect to shale mines.

22678. I take it the workmen fire their own shots?—That is so.

22679. Do you know whether or not they are fired with detonators or with ordinary strum?—They use strum chiefly.

22680. (*Dr. Haldane.*) What is the present time limit for going back in the case of a misfire shot?—I have examined into it, and it varies from half an hour to forty minutes at the present time.

22681. And still there are accidents sometimes in going back after that time?—That is so. It is dangerous to go back in some cases within half an hour, or even an hour.

22682. (*Mr. Smillie*). In some cases have shots been known to go off after an hour?—We were told on Saturday that men would kindle a shot at 3 o'clock, and that the engine man two hours after the men have gone out of the mine has heard sounds which told him that an explosion took place. Sometimes they just kindle them and go away and leave them, and the engine man has heard the sounds of shot-firing two hours after the men have left the mine.

22683. There are a number of accidents arising in sinking dooks from runaway hutches?—That is so.

22684. A good many of your workings in the shale district are steep?—That is so

22685. You want some precaution for the workmen in dooks against runaway hutches?—We do.

22686. That is a prolific cause of accidents?—There is such an accident occasionally. We had one last year.

22687. (*Dr. Haldane.*) The men are at the bottom of the dook, and if there is a breakaway they run down into the dook face?—Yes.

22688. (*Mr. Smillie*). There are a considerable number of men working at what we call the bottom of the dook face?—Yes.

22689. You think a very simple rule might be applied to prevent injuries in the event of runaway hutches?—I do. Our suggestion is twofold: either a strong iron tree erected below the bottom road, or have open points so that when the hutches come down to that point they would run into a sort of cutting which could be made.

22690. You think runaway points would prevent such accidents?—I am certain they would.

22691. Have you been urging that upon managers?—It would not be strictly true to say that we are on the point of agitation, but there has been a great deal of discussion about it. There is no provision in the law respecting it, and we find there is great difficulty in getting anything done which is not mentioned in the law if it involves any expense.

22692. The Scottish Miners have proposed a resolution on the subject?—Yes.

22693. Have you any difficulty about the supply of prop wood, at the present time, of convenient lengths at the proper places where it is to be used?—We have wood both in shale and coal, and the practice is for the wood to be kept at the lye; frequently it is not of the proper length and when the accident takes place the workman is blamed for not having proper wood. We think the right way to meet that would be to change the law making it compulsory on the employers to provide the prop wood at the working face.

22694. The law is that it must be provided of proper lengths.—It so states, but not necessarily at the face.

22695. It must be at either the working place, where the employer is responsible for drawing the material, or at the point where the workman delivers the material.—That is so.

22696. You would make it compulsory that in every case the employer should be bound to have the timber supplied at the proper place?—Certainly. Under the Special Rules at the present time it is incumbent on the workman to have the timber within 10 yards of the working face. This is not fair. He cannot have it there unless he gets it. We think the obligation should be on the employer to have the prop wood of proper lengths at the working face.

22697. With regard to the examination of winding shafts you are aware that must be done now at certain periods, and, according to the Act, there must be an

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examination of the shaft guides, conductors and other appliances?—I am aware of that, but unfortunately my experience is that that examination can take place in a very perfunctory way. It can be called an examination although the pithead man is descending the shaft in the cage and the cage never stops. I was at an inquiry on the 20th May of this year, where the evidence showed that the pitheadman was in the cage making the examination and the cage never stopped but went constantly down; consequently there was no proper examination made, with the result that a pipe found its way into the shaft and the cage came in contact with it.

22698. The usual rule is for the cage to go down slowly, unless the person examining the shaft signals for the engine winder to stop?—Yes—that was so in this particular case.

22699. You feel that, as a matter of fact, the examination which takes place at the present time generally is not a proper examination?—From the evidence at that inquiry I feel it is a sham.

22700. Is not the winding rope examined in the same way?—I have no doubt at all from the evidence that that is so.

22701. (*Dr. Haldane.*) Are there any cases of the winding rope breaking?—It does not happen so frequently now, but it occasionally happens that the rope breaks both in the winding shaft and in the haulage roads. Of course in shale mines it is very different from coal mines, because they are chiefly inclined planes, and the winding rope is a very important business, and it may be half a mile or a mile in length. It is a most important thing for the men to know it is properly examined.

22702. Do you propose, in the case of a winding rope, either for inclined planes or perpendicular shafts, that there should be any particular period it should be allowed to run before renewal?—I could not state what length of time it would take to wear it out, but I think it ought to be carefully examined every day before the commencement of the shift to see it is in good working order. In some cases it might last longer than in others, so that you could not have a fixed period.

22703. It would depend upon the nature of the atmosphere perhaps, whether it was wet or dry?—Yes, and the strain on it.

22704. Have you known cases of broken ropes in which they have been corroded on the inside, and did not show any indication of that on the outside?—I could not say, but we have had cases where it has been obvious that it was cracked partly before the final break took place.

22705 (*Mr. Smillie.*) As to the protection of roof and stoop sides in high shale workings, are there more accidents in the high shale workings through falls of roof and sides than in the ordinary four or five feet workings?—That is so. The ordinary examination is not good. I suggest there should be crowns and rances put up every 3 feet in the roof and sides of the travelling roads. Unless the crowns are put up regularly an ordinary inspection is of no use. A piece of shale falling on a workman is likely to be very serious.

22706. A small piece of shale falling would be serious if it fell any distance?—A quarter of a hundredweight falling but a few feet would kill a man. In some cases we have seams now going 10 feet, and often there is a good deal of powder smoke when it is impossible to see the roof or the stoop 12 feet wide. An ordinary examination is of no use because a man might think the thing was safe, whereas if there were crowns placed every 3 feet from each other, and a prop under them, it would render it safe.

22707. (*Dr. Haldane.*) I do not quite understand the method of working. What is a stoop?—The stoop is the pillar left in, and the room is the working place.

22708 (*Chairman.*) Is there any rule with regard to the distance the crowns must be apart?—There is no rule. At a working face a man must put in props every six feet.

22709. Besides the working face, there is no rule saying what distance the crowns must be apart?—There is no rule.

22710. They must be put up every 6 ft. at the working face; but do you not keep it up behind you until the whole thing is allowed to fall down?—That is only a tree, but I am talking of a crown. The crown going across would tend to protect the whole roof.

22711. Why should not the shale fall in between the 3 ft. space?—It is very strong; it is a good roof and of great height, and pieces fall off the side. By putting the legs close to the stoop side, there would be a guard against a fall from the stoop side, and if you put the rances across from crown to crown it would be a great preventative.

22712. (*Mr. Enoch Edwards.*) Do they not timber the roof?—A timbering is done in a very perfunctory way. When a fall takes place they send a man to timber it, but there is no systematic method of putting up crowns at a given distance—it means a little expense, and they avoid doing it so long as the law does not compel them to do it. Unfortunately when you do not impose any exact conditions it becomes a matter of individual judgment. The roadsman actually stood in the witness box and said in his opinion he had examined the shaft, in the case I have called your attention to. If you leave it to everybody's opinion, it is loosely done.

22713. (*Mr. Ratcliffe Ellis.*) You want to prescribe the way in which it could be kept safe? Just the same as it is prescribed with respect to hauling.

22714. Do not the timbering rules, adopted a few years ago, apply to shale mines?—Yes, but they do not prescribe what I am now suggesting. They require the manager to prescribe the distance from the place where the props shall be placed. Unfortunately he is not down the mine for a week, and it is a difficult job for an overman to examine all the working places in a mine—I do not think one man could do it—whereas if the crowns were put in it would not require the present inspection, because all a man would be required to do would be to examine the crowns, and if he found them in good order he would have reason for thinking it was safe. It should be part of the system of working to put in the crowns every 3 ft.

22715. In the drawing roads?—Yes. If they were put in every 3 ft., and renewed when they were broken, it would be part of the system of working, and it could be easily attended to and rendered safe.

22716. Where you want the crowns put in is in the miners working place?—Yes. If the law is altered to make it compulsory the manager has the option of arranging for its being done.

22717. I want to know where you suggest it should be done. Is it in the miner's working place where he is now required to make it safe?—No; I want it all over the working roads.

22718. Not the miner's working place?—It will come to be done there too. I want it there.

22719. You want it to be done in a particular way?—Yes, one special way.

22720. You are not discussing who is to do it at present?—Quite so.

22721. Are you supplied with the necessary timber to enable you to do it at the present time?—It is not compulsory now.

22722. Are you supplied with the timber to enable you to do it?—Not to carry out this idea.

22723. (*Dr. Haldane.*) You just put in trees?—Yes, at the working place.

22724. (*Mr. Enoch Edwards.*) The men are not called upon to put crowns up at the working face?—If it is a very bad face they are required to do it.

22725. Would they carry on the same method of timbering 6 ft. from the face as you suggest along the road?—In some cases if the roof is very bad they have to do it. they have to put up crowns to make the thing safe, and my point is that there is no obligation to do it on the road sides and stoop sides—it depends only on the men's casual observation, and that is no good.

22726. What is the gradient in these mines?—Sometimes 1 in 2, 1 in 3, 1 in 4 and 1 in 6. We have them even more steep than 1 and 2.

22727. (*Dr. Haldane.*) You say these places are not kept in a proper condition?—And cannot be under the present conditions.

22728. The manager is responsible, is he not, if an accident happens?—But he or his underman say that they examined the place and found it was safe. But I put it to you as sensible men, how can a man looking at a place 10 ft. high see by his eye that the whole thing is safe. If you had crowns you could easily detect whether a place was in a bad condition or not.

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22729. (*Mr. Smillie.*) What you advocate is that it should be made compulsory in those thick seams to have systematic timbering through the method of crowns being put up every 3 ft.?—Yes.

22730. And you say, altogether outside who has to do it, whether the workman or the manager, it would prevent a good many accidents which now arise?—I am absolutely certain of it.

22731. Have you any idea as to the state of the ventilation in the shale mines. There is a considerable amount of blasting—is it done by means of high explosives or powder?—Chiefly powder. The ventilation in many cases is fairly good, but owing to this very heavy use of explosives, it requires special ventilation to keep the place clear. The fault I find with the Mines Act is this: the first rule states that an adequate supply of ventilation should be given, but it does not define it. I think it should be obligatory on the Mines Inspector to see that a definite quantity of air was provided in the working places. The word "adequate" is very elastic, and various people interpret it differently. I think they should say 500 cubic feet, or something of that sort—a definite quantity—so that anyone examining it, and not finding that quantity there, would know they were not doing their duty.

22732. The number of cubic feet would depend upon the number of men employed, or the number of shots fired?—According to the working conditions; but I do not think the word "adequate" is of much use.

22733. (*Dr. Haldane.*) You cannot measure how much air is going to a working face, for instance, very well?—No.

22734. You can measure what is in the main airway?—In those stoop and room workings, where you know the height and the width, I think they can obtain a very good idea by an instrument as to what is passing every second. They could see the motion of it.

22735. They would only see that in the main road?—They would see it in the main air course, and that would conduct the air round the mine; and they would see what ventilation was passing along by the motion of the current.

22736. (*Chairman.*) You suggest there should be some instrument placed near the working face which would show the rate at which the air was going?—What I suggest is this, that if the Mines Act defined what was to be kept, under certain conditions, the manager and overman occasionally—say once a week—by an examination would have a very good idea of what was passing all along by the strength of the current.

22737. You might say that if the current was going at so many miles an hour that would show that the ventilation was good?—Still, the question of cubic feet has something to do with it. Where the air course is very wide a slower current would take along a much greater quantity of air.

22738. You then suggest that in an airway of particular dimensions the current should be so many miles an hour, and in another airway it should be more, and so on?—That is what I mean.

22739. (*Mr. Ratcliffe Ellis.*) With reference to the haulage, I suppose anything that could be devised to prevent tubs running down an incline, or, if they did escape, prevent their doing mischief, you would be quite content to accept? There might be something better than that which you suggest, might there not?—I may state under the present system they have what is called a jock, that is an instrument attached to the end of the hutches with two prongs attached to it, and whenever a breakaway takes place, that is supposed to catch in the sleepers and turn the hutches off the road. We had an accident arising from that last year—from the jocks not being put on—consequently I think if you had runaway points it would prevent all that.

22740. If there was anything better that could be devised you would not object to it. You say what is there at present is not sufficient, and you want something to make the mischief as small as possible if they do run away?—Yes, the best arrangement that can be got.

22741. You say you have a good deal of shot-firing in your mines?—A very great deal.

22742. Do the rules in the Coal Mines Act apply to the shale mines?—Yes.

22743. Have you anything to suggest beyond what is provided for in the Act?—The suggestion I make is the one which Mr. Smillie referred to, namely, when a shot misses the miner should not be allowed to tamper with that shot until the next day.

22744. You think there should be a fixed time?—Yes, and that fixed time should not be during that shift.

22745. That should not be left to his discretion?—That is so.

22746. Where the shot is fired is in some man's working place?—Always in a working place.

22747. Supposing a shot was fired between the shifts, and then a working shift comes on after that, is the man in that place not to do any work the next day?—What I suggest is this: supposing a shot misfired at three o'clock, then no work should be done in that place for that day, and by the next morning there would be a sufficient lapse of time to have extinguished any fire in the hole.

22748. That would result in the miner not being able to work at all on the following day?—Not for that shift. He would be able to work the following day, because there would be sufficient time to allow the fuse to go out. He would have to begin the next morning, and bore a new hole.

22749. You think it would not be proper to go there again that shift?—I am certain it would not.

22750. What is the length of time you think a shot may remain without exploding?—The men have told me that they have gone back at the end of an hour in some cases, and it was quite safe; but we have had cases of men going back at the end of an hour and saying it was then safe, whereas the engine-men have heard shots going off two or three hours after the men left the mine.

22751. How are they fired?—By a strum or fuse. I may say the men kindle five or six in some cases, and so save their having to go back into the smoke again after each shot.

22752. They cannot examine all the shots immediately after?—They examine the whole place the next morning.

22753. If they have not examined all the five, or make a mistake, then one might not have gone off?—That would involve their going back in half an hour to see; but if they did not go back until the next morning they then know it has either gone off or gone out.

22754. You think it should be a rule that if a shot has not fired it should not be dealt with until the following shift?—Yes, a lapse of seven or eight hours.

22755. Do you see any objection to firing more than one shot at a time?—Not necessarily, with practical men. Supposing the place is so thick with smoke that you could not see 2 feet before you, if you had to go back and kindle every shot that would be a very terrible experience.

22756. Are you aware that there are districts where the height is as great as yours, and probably greater, and where the system of timbering you recommend is adopted?—I am glad to hear it.

22757. Under the General Rules?—But it is not compulsory.

22758. The manager is responsible if he does not keep it safe, and he considers the only way to do it is something on the lines which you suggest?—My reply to that is that that is a matter of opinion. Where you have a good manager he will do it, but where you have a man limiting the expense he will not do it—and it is not being done just now in shale mines.

22759. (*Dr. Haldane.*) When there is an inquiry, does not that matter come up?—It does, but the man is dead by that time; there is no change in the law, and it will simply go on.

22760. (*Mr. Ratcliffe Ellis.*) Has the present system never been questioned as to whether it is safe or not?—Our means just now of rectifying that are very clumsy. We could not ask the company to do it now; they are not bound by law to do it. An inquiry takes place after the man is dead; the evidence then comes out, and it all depends upon the good sense of the manager and the employer whether they have a lesson from that inquiry or not. They are not obliged to do it.

22761. The question is how much detail would you prescribe. What it requires now is that it should be kept safe. You do not want to give the management any discretion as to the means they should adopt, but you want to say that they should adopt certain means?

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—There is no safety where it is left to everybody's individual opinion. I want them to adopt the same rule as with regard to holing.

22762. There is a little discretion there.—Not beyond 6 ft.

22763. You might apply that to almost everything in the Mines Act?—I am dealing with cases coming under my own experience.

22764. (*Dr. Haldane.*) The purpose of the new Accidents Inquiry Act is to enable questions like this to be thoroughly threshed out before a jury?—Yes, it is being done now; but then these inquiries do not change the law, unfortunately.

22765. Supposing in the opinion of a jury the method of working is unsafe, they will return a verdict to that effect, will they not?—Yes, if they are asked, they may do it.

22766. A manager surely cannot go in the face of that?—They can go in the face of that. They often pay compensation, but compensation does not bring dead men back to life.

22767. It would be a question of compensation in any case?—So long as a man can say in his opinion he thought it was safe, that is sufficient.

22768. (*Mr. Ratcliffe Ellis*) General Rule 21 is: "The roof and sides of every travelling road and working place shall be made secure, and a person shall not, unless appointed for the purpose of exploring or repairing, travel or work in any such travelling road or working place which is not so made secure." There is no abstract point; it is a specific obligation, and the manager is liable if that is not done. You want to go further and say they must adopt a particular way of securing that. Now suppose the manager does that, and it is not safe, what then?—My view is that in 19 cases out of 20 where accidents occur, they occur from falls of the roofs and sides. You might think it is safe, and I think it is unsafe.

22769. You might be mistaken possibly as to your view of keeping it safe. If the manager adopted your view he would not be relieved from responsibility if it was not safe?—What I affirm is, that if my idea was carried out the bulk of cases of accidents due from falls of roof would be prevented. If a man saw a crown was broken he would know it was not safe; but if now he looks up 10 ft. he cannot possibly say whether it is safe or not.

22770. Supposing a manager adopted your view, he would be responsible if it was wrong and not you?—He would be responsible; but if he did what I am suggesting now he would be relieved from the bulk of the accidents.

22771. That may be so or not. You want to prescribe the way in which it is to be made secure?—That is so.

22772. Now, as to the timber. Where now is the timber taken to by the management?—In general cases the lye, where the drawers get the hutches.

22773. That is the passbye. Where the full tubs are taken to, and the empty tubs are taken from?—Yes.

22774. You make a complaint that the timber is not in suitable lengths?—My complaint is, that it is not to be got in the lye always in suitable lengths.

22775. That is an offence against the law?—There is this to be said about it, when a man has an accident a quibble arises as to whether there was timber there or not.

22776. That is a question of fact. If a manager is summoned for not having timber there, and then if he says there was timber there, and someone else says there was not, whoever tries the case has to decide who is telling the truth?—Yes.

22777. That is not the point. Where the manager has to have the timber in sufficient quantity is where they get the empty hutches?—Yes.

22778. What is the difficulty about that?—If it was put where I suggest, the faceman would not have to blame the drawer—he would go out and get it himself.

22779. It is part of his business, when he takes the full tub, to bring back the empty tub. What difficulty is there in putting the timber on the empty tub and bringing it back to the face?—There is this difficulty: he cannot bring it if it is not there.

22780. The manager is responsible for that, and I cannot see what difficulty there would be in his putting it into the empty tub and bringing it to the face?—The difficulty is not exactly obvious, but there is a difficulty If a man has a drawer the drawer has to remember to put the wood in of proper length; whereas, according to my idea, the Company must have an official in the lye who had examined the working face and would know there was wood required there, and he would say, "There is the wood."

22781. You do not want to have an unnecessary quantity of timber near the working face—there is no room for it?—A road the proper width would have room for the timber.

22782. When the collier sends his drawer he says, "I want props of such and such a size." The drawer brings the exact props he wants from the gate-end where there is a large store of timber. How would you get over that difficulty? The collier does not know in the morning exactly the quantity and size of timber he wants.—I think you are wrong in that about the size. Generally, in 95 cases out of 100, a faceman does know to an inch the height of the wood he wants for the whole of the day. Taking one day with the other he would. He would have an adequate supply—a liberal supply.

22783. You do not want a store of wood placed outside your working face; you want just what you require. Is it not more convenient for the drawer to go down to the gate-end and bring in the tub exactly what is the quantity required, than to have a large quantity of timber which may not be wanted, and messing up the place?—I do not agree with you. In stoop and room shale mine working, a very small place would hold what wood was wanted for a week. A man will not go more than a fathom-and-a-half or two fathoms in one week, and a very small place would keep sufficient wood for a fortnight. There are other difficulties. Take, for example, a man killed to-day in the mine—his drawer may have told him, "I looked in the lye and there was no wood." By the time of the inquiry we have the greatest difficulty in preventing the official having people in the witness-box to say there was wood in the lye on that occasion, whereas we know there was not. Under my system it would be different.

22784. Would your system make all people truthful?—The face could be examined at the time of the acoident to see whether there was wood there. The obligation should be on the company to have the wood there.

22785. You would shift the obligation from the drawer and the collier on to the management?—Yes, on to the management.

22786. Do you propose to make any reduction from the wages for the increased responsibility which you will put upon the management, and which you are taking from the collier and drawer?—I think you are joking now.

22787. Indeed I am not. At present they are paid for doing certain work, which includes taking the wood there, and they are responsible for it. You want to relieve them of that responsibility and put it upon the manager?—My reply to that is this, that that will adjust itself.

22788. How?—Under the present system the management allow the men to earn certain wages, and when they find they are paying too high a rate they give them notice of that, and the end is we find they have to take something off. That will adjust itself between the manager and the workmen's agents.

22789. You admit it is a case for adjustment?—I admit there might be something in it.

22790. That is perhaps all I ought to ask you to admit. When you speak about an examination of the guides, &c., do you mean the ropes?—I mean all the woodwork, and all the other things in the shaft which are a fixture. I mean everything about the shaft.

22791. General Rule 20 is: "Where the natural strata are not safe, every working or pumping shaft shall be securely cased, lined or otherwise made secure?" That provides for the shaft being made secure?—Yes.

22792. Then we have Special Rule 48: "They (the roadsmen) shall, at least once in twenty-four hours, examine the state of the external parts of the machinery, the state of the guides and conductors in the shaft, and the state of the ropes, chains, and other similar appliances of the mine which are in actual use below ground, and shall make a true report of the result of such examination, and every such report shall be recorded without delay in a book to be kept at the mine for the purpose, and

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shall be signed by the roadsman making the examination." Do you want anything more than that, if it is carried out?—I want more than that, because you will get men to go into the witness-box now to tell you that they made an examination, whereas they go on the cage and until they get to the bottom the cage is constantly in motion, and they have only a naked light to see it with

22793. If this requirement is complied with do you want anything more than that?—Yes, I do, I want far more.

22794. Even if this is complied with "At least in every twenty-four hours examine the state of the external parts of the machinery, the state of the guides and conductors in the shaft, and the state of the ropes, chains, and other similar appliances of the mine which are in actual use below ground, and shall make a true report."—It does not say "properly."

22795. I will assume it means "properly." Do you want more than that?—I do not want to discuss the means.

22796. If there is a proper examination made, as required by the rule, do you want anything more than that?—It does not say properly done.

22797. If it is properly done?—That is a matter of opinion again.

22798. I want to go by stages. If it is properly done do you want more than that?—Yes. If you and I first agree as to what is "properly done," I will agree with you.

22799. If it is done as you think it ought to be done. You do not want to put that in the rule, "If it is done as Mr. Wilson thinks it should be done"?—I want that the cage should stop at every 6 ft. He goes on the cage and down to the pit bottom and the cage never stands, and he is just looking round.

22800. There is no way which would satisfy you unless it is provided that the cage must be stopped at every 6 ft.?—Yes, and no man in this room could do it unless it is done in that way.

22801. If it stopped every foot would it satisfy you?—That is an extreme statement to make. It would not be required to stop every foot.

22802. You are not satisfied with this rule unless it provides how it should be done specifically?—It must prescribe a specific examination.

22803. You say that your method is the best of all?—I say what I suggest gives one of the conditions of a sound examination. I do not say it gives all the conditions.

22804. With reference to ventilation, how often do you say the air should be measured?—What I do say is that, where the height and the width, and the cubical area of the air-course is known, an examination of the current, say twice a week, with ordinary care would suffice for ascertaining if there was an adequate supply of air, provided you first define what an adequate supply is.

22805. Can you define an adequate supply of air?—I think that is a question for a scientific expert—a man who has studied the matter thoroughly—just as you do now with school houses and public buildings where a number of people are working. The space and so on is defined.

22806. You do not feel competent to describe it?—If I had known you were going to put it in that way I should certainly have improved my knowledge before I came here; that is not the sort of information I require every day.

22807. If you had any views it might be useful to give them to us?—I will be perfectly frank with you; I do not pretend to know things I do not know.

22808. There is a provision for the air currents being examined in General Rule 1: "In the case of mines required by this Act to be under the control of a certified manager the quantity of air in the respective splits or currents shall at least once every month be entered in a book to be kept for the purpose at the mine?—I do not think that is a very frequent examination; and besides, my point is this, that that does not provide any guide as to what is to be an adequate supply of ventilation under the existing conditions.

22809. It says "Shall at least once every month be measured and entered in a book to be kept for the purpose at the mine"?—I do not think that is sufficient.

22810-1. How often is it measured in your mine?—Judging from the reports of the workmen I should say in many cases it is not once a month, but on that point I would not like to dogmatise.

22812. (*Mr. Enoch Edwards.*) Your evidence refers only to shale mines?—I am prepared to give evidence in regard to coal.

22813. But now it is given in reference to shale mines only?—Yes.

22814. You have been asked about measuring the ventilation twice a week. Do you mean measuring the amount that goes down the shaft, or measuring the air abstracted on the working faces?—The working faces.

22815. You say that sometimes they fire five or six shots at a time?—Yes.

22816. That would be, I suppose, to cover the whole width of the face?—Yes.

22817. And they so arrange them that by a longer or shorter length of the fuse a man can go to his place and clear it. You do not work by shifts?—In some cases.

22818. I understood you to say they were fired at the close of the shift?—Yes, fired at 3 o'clock, and another shift might come on at 10 o'clock.

22819. So that the tubes are cleared when the other men come on?—Yes.

22820. What do you mean by men coming back to them. Are all the shots fired at the close of the shift?—No, there are a great many cases in which the men are firing shots every half-hour in the day.

22821. They occasionally get a missfire?—Yes.

22822. And they may go in too early and the shot go off afterwards?—The shot may go off while they are in the place.

22823. Have you had experience of that?—Yes, I should say every year we have one or two bad cases. I had a bad case at Ingleston last year where both shots missed, and the man went back to one and put it right, and then he went to the second one, and it went off and killed him.

22824. (*Dr. Haldane.*) How long was that after?—Inside the hour.

22825. (*Mr. Enoch Edwards.*) We have had evidence already about that. You say in the case of shots fired during the working of the shift, where two or three are fired and one happens to miss, there is considerable risk, and you have had accidents from that?—Let me correct this; it is not the practice amongst our men to fire more than one shot at a time during the day, but at night when they are firing shots at 3 o'clock they may fire four or five at once, but they do not go back on the shots.

22826. In reference to firing those four or five shots at the close of the shift, you do not suggest that there has been any accident to the men going back the next morning?—Not after seven or eight hours' interval.

22827. You suggest that if this happened in the day time the man would have to go?—Yes, and my opinion is that a man's life is of more importance than his work—and if it misses fire he should go home. There is no doubt about that.

22828. In reference to the question of timbering, does the seam run pretty uniform?—I should say there would not be many faults in it unless it might be one every 100 yards.

22829. There is no great difficulty as to the length of props required?—Not generally.

22830. Do they sink their props at all in the floor?—They sink them one or two inches if it is required.

22831. If it is too long that is what they do?—That is what they do if it is too long.

22832. Is there much complaint about lack of timber?—Occasionally both in coal and shale.

22833. You say if they are properly timbered you have a greater guarantee of safety than you have if they are left without timber?—The greatest guarantee I know—and then it is easy to see under the system I propose when things are wrong.

22834. When the props are broken you can replace them?—Yes.

22835. (*Dr. Haldane.*) What is it that you think is specially unsatisfactory about the ventilation? Is it the prevalence of powder smoke or is it gases in the air?—

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In many cases the current is not sufficient, and there is no sufficient rule. There is just the word "adequate," which people look at differently.

22836. What is wrong with the air, is it bad smoke, or gas, or black damp in it?—That is one fault. In many cases it arises in this way, that where there is a sufficient quantity of air going down the shaft it is not properly conducted round the mine.

22837. What is wrong with the air at the face? Is it the amount of powder smoke or gases arising from minerals?—You mean its chemical composition at the face?

22838. Is it the smoke, or the heat, or the fact that a light will not burn properly that troubles the men?—If the air is bad at the face there is an accumulation of lamp reek, and they see it is in a bad condition; and if they are firing shots it becomes in a very bad state, and in some cases you cannot see 2 ft. before you. If there was a specific condition in the law that there must be so many cubic feet passing per second you could determine that by measuring the current.

22839. You could easily measure the air into the split in the mine on the main airway; but when you get actually up to the working face it is a very difficult thing to examine it with an anemometer.—In the stoop and room workings they conduct it with a screen-cloth, and that is brought within 6 ft. or 7 ft. of the working face. There would be no difficulty in seeing from the anemometer if there was a good current of air. Men can see it from the lamp when they hold the lamp out.

22840. You are aware that an anemometer is not a very delicate instrument?—Yes.

22841. It takes a fairly good current to move an anemometer?—That is so, and we want a good current.

22842. (*Chairman.*) There is a Special Rule about timbering which seems to apply to Scotland only. The last Special Rule is: "In addition to a supply of suitable timber being provided at the working place, gate-end, passbye, siding or similar place (in terms of General Rule 22), the miners where the timbering of the working places is done by them shall keep a sufficient supply of suitable timber for immediate use at or within ten yards of every working place where mineral is being gotten by them, unless where exceptional conditions render this inconvenient." You say it is very hard that a workman should be punished for contravention of this rule, whereas the manager is only bound to provide timber at the gate-end, which may be a long way off?—Yes, and that is very unfair; it should be provided at the face.

22843. It seems in Scotland there can be no objection raised to that, because you have a Special Rule which makes it incumbent upon the men, at all events, where that is not inconvenient to have the timber at the face?—That is so. There are one or two other points I should like to mention before I conclude, if you will allow me. The first is this, I think the present Inspectors are inadequate. We have only half a dozen, and we think there should be one for every 10,000 men. The next is under General Rule 38; it gives the miners power to appoint two men to examine once a month. I think it should be made compulsory on the men to appoint two men to make the inspection once a month, and the law should be altered to allow independent practical men to make the inspection.

22844. What do you mean by independent practical men?—A man like myself, or a practical mining check-weigher, and not dependent upon the employers, who would do this work much more thoroughly.

22845. (*Mr. Enoch Edwards.*) Would the employers object to your examining?—Some of them would not, but the bulk of them would. Further, I think the law should be changed so that firemen could be appointed and dismissed by the Government Inspector, and paid by the employer. At the present time a fireman is simply an employé of the employer, and he must consult the employer when a question takes place; whereas if he was appointed and dismissed by the Inspector and paid by the employer he would be a far more efficient man.

22846. (*Chairman.*) What you say is that he should be appointed by the inspector and not by the manager?—I think the appointment of firemen should rest with the inspectors.

22847. (*Dr. Haldane.*) How are the inspectors to know his capabilities?—I think the firemen should be subject to a proper examination, and obtain a certificate to qualify them for the work. The inspectors would know the men and have a list of them, and they would know exactly the kind of men to appoint. They would have a personal knowledge of most of the men.

22848. (*Chairman.*) The inspector would have a knowledge of them?—He would; he would not have an intimate knowledge, but a very general knowledge, of most of them. Then, further, I do not think the Special Rules should be enforceable unless they are endorsed by a joint committee representing the employers and the men. At present it is slipshod. If the manager can get the Inspector and the Secretary of State to adopt Special Rules, although they have not the men's consent, they can be enforced. It is admitted the men can object, but it is a haphazard way for them to object, and I think the rules should have the endorsement of a joint-committee. In regard to cages, I think the present law is dangerous and loose. There is no rule whereby they must have iron bars on each side of the cage, or a door to prevent men falling out. In hydraulic lifts they have bars which will go together like a sponge. and I think they should have such bars on cages so that they could be closed, and the men could not fall out, We have accidents every year through men falling out of the cages.

22849. (*Mr. F. L. Davis.*) Do you know of cases where an accident has occurred and men may have been able to jump out, but have been prevented from doing so because of the bars?—I do not know of a case. My experience arises from men falling out. Then there is no prevention of over-winding. The rule says the speed shall not be more than three miles an hour. I do not think that is adequate, I think we should have a law making the adoption of preventative measures compulsory. In regard to the managers, I think the present law is loose. A man can now sit for his certificate if he can show he has had five years' practical experience in a mine. That is interpreted very loosely. A man enters a mine say at 13; he is a pony driver or a general on-cost worker, and he may never have worked at the face in his life—but according to that he can sit and become qualified. I do not think it is fair to the men to have a man to dismiss and pay them who has no real knowledge as a practical miner. I think he should have had four or five years' practical experience as a working miner at the face. Further, in General Rule 39 you have a provision that no person can be employed at the face unless he has two years' experience under a practical miner. That is a very loose rule. One man cannot be allowed to work alone at the face—two unskilled men can work. We think that should be altered, and that no man or men should be allowed to have charge unless he or they have been trained for a certain number of years under a practical working miner. Under the present law a man cannot sit for an examination unless he pays £2 for the First Class Certificate and £1 for the Second Class Certificate. I do not think the State are so very hard up as to exact those fees from a working miner. Oftentimes a man has a family, and there is great pinch in providing the £2. I think that should be removed in both cases.

22850. (*Chairman.*) It is worth the £2 to him?—If you made it obligatory that he should pay £2 if he passed and got his parchment, he would be getting value for his money; but for a man to pay £2, and have the worry of the examination and not pass, is too much.

22851. (*Dr. Haldane.*) The examiner has to read his papers?—But he is paid for that.

22852. Out of the fees?—That may be. Then with reference to the investigation of mining accidents, I should like to suggest an improvement. I think the Procurator Fiscal, who manages the inquiry, should not be a practising lawyer who may be doing private business with the employer. We find where that is the case they are very keen sometimes to prevent us putting nasty questions. I suggest that the Procurator Fiscal who manages the inquiry should not be a man engaged in private practice and acting for the employers. Further, we think there should be a verbatim report of the inquiry, and that the representatives of the deceased should get a free copy of that report. This would all tend to make managers pull up, if they felt there would be a thorough inquiry and report. If they were to be thoroughly exposed when they neglected their business, those things would be very useful.

Then, again, there is no proper sanitation just now in the mines—none whatever. A man cannot even get a drink of water. The employer is under no obligation to

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Mr. John Wilson.

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supply it, but a very little expense, I believe a halfpenny a ton, would provide the putting of a half-inch pipe all round the mine which would enable a supply of water to be obtained.

Further, with regard to human refuse, it is really very shameful. A man goes in some 50 yards from the face and performs a natural function, and it is left lying there. Proper facilities should be provided. A trench could be dug and a pail put into it, and there should be one of those in the shale workings at every upset close to the face, which should be removed regularly. In my judgment, it would be infinitely better for the men than to have the ventilation beating on this refuse and the microbes polluting the atmosphere. I do not believe the water and the natural facilities would involve a cost of more than a farthing or halfpenny a ton, and, in my judgment, it would very greatly improve the healthy condition of the working miners. I hope that this Commission will at least give some attention to that very simple precaution, because there is none just now. It is simply disgraceful. In many cases the men cannot get a drink of water. There is a small trench and the water gathers, and the men are supposed to drink that when it settles. It trickles along the pavement and comes from places where no man should be allowed to drink it from. I hope some precaution will be taken to alter the present disgraceful condition of things.

22853. (*Dr. Haldane.*) Do not the men take water down with them?—They may, but that, of course, is very inconvenient very often.

22854. You could not have a tap everywhere?—I did not say that—you would have it in the lye.

22855. (*Mr. Smillie.*) When you said that under General Rule 38 the workmen should be compelled to make an examination, did you mean that you had passed a resolution to that effect?—I must admit that we have not come to a resolution upon that. I am speaking from my experience that it should be compulsory on the men to make the examination.

22856. You would not put it that the miners are of that opinion?—I certainly would not say I have a mandate from the men to state that one point here.

22857. What you have said this morning with that exception represents the views of the Federation?—I am speaking for the shale miners primarily. I did not have a mandate in regard to this matter about the water; but I think the general body of the miners would be in favour of that if you gave it to them, and would thank you very much.

22858. (*Mr. Ratcliffe Ellis.*) How long ago is it since you worked in a mine?—I have not worked in a mine for 21 years.

22859. For how long did you work in a mine?—From the age of 13, I think, until I was 24½—shale and coal and iron.

22860. About 11½ years?—That is so.

22861. (*Dr. Haldane.*) Is the work in a shale mine dirty work, and do the men get black?—The men's faces are cleaner than when working in coal. The powder smoke, though thick, does not black the face like coal dust.

22862. There is not so much black dust about as there is in a coal mine?—No.

22863. We have had some evidence with respect to the desirability of providing baths at the surface. That would not be such an important matter in a shale mine as in a coal mine?—I do not know that I have a mandate to make the suggestion, but I certainly think if there were facilities for men washing themselves when leaving work, and being able to leave their pit clothes there, it would be a great improvement.

There is another matter:—Under the present law the employers are not bound to supply an ambulance wagon—they are bound to supply stretchers and splints—to take a man to the infirmary. We had a bad case last year, where a man was badly injured and died within three hours; but he was kept lying on the pit bank for two hours before they obtained an ambulance wagon. Now that may have been a case where if they could have got him away quicker his life would have been saved. I think it should be compulsory on the employers to have an ambulance at every colliery so as to remove men under such circumstances—I do not mean every single pit but every colliery. I may say that the Miner's Federation have adopted that suggestion. I do not know whether it has been mentioned, but they have passed a resolution in favour of it.

MR. RICHARD MCPHEE, called and examined.

Mr. Richard McPhee.

STATEMENT OF WITNESS.

22863A. I have had 26 years' experience of mines, 14 years as manager, 3 years as an overman, and the balance as fireman, roadsman, and oncost man. I am at present manager at Bothwell Park Colliery, owned by William Baird & Co., Limited, where nearly 600 men and boys are employed; 180 of that number are Poles. The output of coal is 217,000 tons per annum, and is got from four seams, with bad roofs compared with roofs in the other collieries of Lanarkshire. The haulage is mechanical throughout, with compressed air as the motive-power, and ropes are carried up to within an average distance of 70 yards from the face. I have had 11½ years' experience of Poles, and for the last 5 years the average number employed would amount to 180. I have found some of them equally as good as the British workmen under ordinary conditions, and all of them more amenable to the discipline of the mine. While socially some are not all that could be desired, others are good citizens and are very thrifty, many of them having bank accounts to their credit. They were first introduced to this country in a labour dispute at an ironworks in Ayrshire, many of them since then finding their way to the mines, they in turn bringing others. When a new Pole goes to work along with an experienced Pole he does not as a rule get an equal share of the money, but is paid what he is worth. In that respect they are not worse than the British are, as they (the British) take a novice or a boy down with them, and claim full ben of hutches and pay the novice and the boy their value, which may be anything from 1s. 6d. to 2s. 6d. less than the value of their share, and the man who employs them pockets this which makes his earnings a long way above the current wage. We have Poles working in the same place and in neighbouring places at the same rates as British workmen. We have not had a single accident to British workmen through Poles not knowing the rules and regulations. We have the rules printed in Polish and posted up, also have circulated copies to those who could read them. For the past five years we have had only two fatal accidents—one of these was caused by the deceased wilfully pulling the cap wires from a borehole that was charged with saxonite and stemmed. The charge exploded, and he was killed instantaneously. The other was caused by a fireman going in too quickly to a roadhead after firing a shot, when a stone that was loosened by the shot fell on top of him. There were eight accidents to British workmen reported to the inspector of mines, and three to foreign workmen.

22864. (*Chairman.*) You have had 26 years' experience of mines, 14 years a manager and the balance as overman, fireman, roadsman and oncost man. What does an oncost man do?—Ordinary repairing work.

22865. There are 600 men and boys employed in your colliery, and 180 of that number are Poles. You have had 11½ years' experience of Poles, and for the last five years the average employed would amount to 180. You have found some of them equally as good as the British workman, and all of them more amenable to the discipline of the mine. We have been told that amongst themselves they are extremely quarrelsome. Is that so?—We do not find that.

22866. You have no difficulty with them, either among themselves or in their relations with other workmen?—No.

22867. As regards discipline, they are more easily managed than the Scottish men?—Yes, that is so.

22868. They were first introduced in consequence of a labour dispute, and they brought in others. When a Pole goes to work along with an experienced Pole, he does not as a rule get an equal share of the money. He does not get the ordinary wage of a miner, but merely what he is worth?—Yes.

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22869. In course of time, when they get skilled, they get the same wages and belong to Trade Unions?—Yes; from the very start, I should mention, they become Trade Unionists.

(*Dr Haldane.*) How is it they work at a lower wage?

22870. (*Mr. F. L. Davis.*) That is contract work?—They are paid according to their ability.

22871. (*Chairman.*) They are paid in the same way in the British mines. A novice or boy is taken down with miners and paid anything that his work is worth. You have not had a single accident to British workmen through Poles not knowing the rules and regulations. How do you see that the Poles comply with these rules and regulations if they do not know the language? How can you make them understand what they have to do and not to do?—They are educated from first going into the mine. We post up the rules in Polish, and also circulate copies amongst the Poles who can read.

22872. You find they mostly can read their own language?—Not most of them; a good few can.

22873. They tell the others?—Yes. When the Pole comes to the country he is taken in hand by an experienced Pole who has been employed in the mine for some time, and educated into the method of working, and the rules at the same time.

22874. Do you find that satisfactory?—Yes.

22875. You have had no difficulty in working with these 180 Poles?—Not the slightest, any more than we have with the other men.

22876. You say for the past five years that you have only had two fatal accidents. Do you mean caused by Poles?—No, two British workmen. We have had no fatal accidents with the Poles.

22877. Only two fatal accidents?—Yes, in the five years for an output of 1,085,000 tons.

22878. One of these was caused by the deceased—would that be the Pole?—wilfully pulling the cap wires from a borehole?—No, he was an Irishman named Dan Lynch, a thoroughly experienced man, who was making a manhole on a haulage road, and he had bored a hole, and he charged it with saxonite——

22879. We need not enquire into that, because it has nothing to do with the Poles. Of the reported accidents in five years there were eight to British workmen and three to foreign workmen. That is such a small number you can hardly get an average. You employ 600 men and boys. That is something over 400 British men and boys and 180 Poles. Therefore, it is very much the ordinary proportion you would expect?—Yes.

22880. The accidents are pretty much in proportion to the numbers?—The percentage is 30 to British workmen and 25 to Poles.

22881. (*Mr. Ratcliffe Ellis.*) You have two Poles here?—Yes.

22882. Have they been in this country long?—The eldest of the Poles has been in the country for eight years.

22883. Has he worked during that time under you—Yes.

22884. How long has the other been here?—He has been in the country seven years.

22885. And worked all that time under you?—He has been employed for three years as a drawer-off in the pit top, and the remaining four years as an underground worker.

22886. (*Chairman.*) Do they understand the English language?—The elder fellow does, and the other as much as is needed.

22887. (*Mr. Smillie.*) You say the average number of workmen you have had during the last 10 years is 180?—During the last five years. The five years before that it would be much less.

22888. Is it a fact you have fewer now than at any time for the five years?—No. That census was taken on the 17th May, and we have rather less this month than last, probably by six. *Mr. Richard McPhee.* 13 June 1907

22889. Do you post up the Special Rules and the Coal Mines Regulation Act in the Polish language?—No, in Lictwish.

22890. Are not the men you refer to as Poles, Lithuanians?—They may be.

22891. Do they belong to Poland?—They are commonly called Poles.

22892. Do they belong to Poland?—Most of them.

22893. Are you sure of that?—I would not like to say that every man belongs to Poland.

22894. Is it not the fact that the large majority of the workmen are Lithuanians?—Yes, but there is very little difference.

22895. They have a different language?—They have the same books.

22896. Have you found a very strong feeling among the foreign workmen: if you call them Poles they say they are not Polish men, they are Lithuanians, and have a language and literature of their own of which they are proud?—I have not found a Pole take objection to being called a Pole, except a German, who resented it very much.

22897. These men are members of our Trade Unions, and we are now printing our rules in their language, but it is not in Polish. It is in the Polish language that you have those rules posted at the colliery?—It is in Lictwish.

22898. And all the workmen who read and write understand that?—Yes.

22899. What proportion of those 180 understand English? Do any of them?—There will be a few.

22900. You have agents holding morning meetings at your collieries very often?—Yes.

22901. Would I be correct in saying that 75 per cent. of those men do not understand the speeches delivered to them?—I do not think so.

22902. I would be wrong if I said so?—There is a method of speaking to these men. The speeches that are made by the miners' leaders may not be understood by the Poles, but when it comes to our officials to deal with them in a sort of pigeon English we have no difficulty in getting them to understand.

22903. It has created almost a new language?—I do not know if pigeon English is looked upon as a new thing. It is as old as pigeon Scotch, or something of that kind.

22904. The foreign workmen usually work in companies; they do not mix up so much. The managers usually endeavour to have them in sections by themselves?—We make no arrangement for that; we have Poles working with British workmen.

22905. I think in Bairds' colliery generally. Do you know what takes place at Craighead and Priory. That is done in some of Bairds' collieries?—We have sections confined to Poles, but not for the express purpose of isolating them.

22906. Do you find those very good men, willing to obey all orders, and carry out the law so far as possible?—Yes.

22907. You have no fault to find with them at all?—None.

22908. (*Chairman.*) What are their names?—That one is William Yorksin, of 72, Bothwell Park Rows.

22909. Is that what you call them?—That is the name that passes through the books.

22910. What is the name of the other one?—Joe Ymities, of 62, Bothwell Park Rows.

Mr. WILLIAM YORKSIN, called and examined.

22911. (*Dr. Haldane.*) You have been eight years in Scotland?—Yes. *Mr. William Yorksin.*

22912. Did you ever work in a mine in any other country?—Yes, on a farm.

22913. You came straight from there to Scotland?—Yes.

22914. What was it that brought you to Scotland; you had friends here?—No, just myself, single.

22915. How did you know where to come to?—There are some people who send letters for us to come.

22916. Did any of your friends in your own home work in the mines in Westphalia, in Prussia?—No.

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Mr. William Yorksin.

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22917. They never go there?—No.

22918. In Westphalia, in Germany?—No; no places. It is the first time they came to Scotland.

22919. They came to Scotland?—They came to Scotland.

22920. Do the men from the same part of the country go also to the mines in Westphalia, in Germany?—Yes.

22921. Some go?—Some go.

22922. There are a great many there. I have seen many of your countrymen there. I think they are in Westphalia. Can you speak German?—No.

(*Mr. McPhee.*) We have a number of Poles from Westphalia, and some have been employed in coal mines in Poland.

(*Dr. Haldane.*) In Cracow.

(*Mr. Smillie.*) The majority are agricultural labourers.

(*Mr. McPhee.*) We have some from the mines in Poland.

22923. (*Dr. Haldane.*) Do you like Scotland?

(*Witness.*) Well enough. It is a fine country. We like Scotland.

22924. The wages are good on the whole?—Fine wages. Five, six, seven, eight, or more different works to go to.

22925. Do you think your countrymen are happy here?—Yes.

22926. You would rather not go back? Would you rather stay here than go back?—For pay?

22927. Would you like to go back to your own country again?—Who said it?

(*Mr. McPhee.*) This man has a wife and family in Poland.

(*Dr. Haldane.*) Are they not coming over?

(*Mr. McPhee.*) No, she refuses to leave the country They are a passing population. Nearly 30 left our district last Tuesday for Canada, some to be employed in the mines and some on the railway.

(*Mr. Smillie.*) A large number of our foreign workmen have gone to America during the past. They come from Poland here, stay a short time, and then go to America.

(*Mr. McPhee.*) Yes.

(*Mr. Smillie.*) Do you know whether compensation is paid to those men just as freely as to British workmen?

(*Mr. McPhee.*) In our colliery?

(*Mr. Smillie.*) Generally.

(*Mr. McPhee.*) In our colliery, certainly.

(*Mr. Smillie.*) Have you known the Scottish Mine-owners' Association refuse to pay the widow of a foreign workman who is killed, on the ground that she was not here and was not a naturalised British subject?

(*Mr. McPhee.*) I do not know that. know there is a great amount of malingering. There is a higher percentage among the foreign workmen than the English workmen, and for the least injury they look for compensation.

(*Mr. Smillie.*) In things of that kind they are very well able to look after themselves?

(*Mr. McPhee.*) Very well. That is the main difficulty we have in dealing with them; they demand an exorbitant price when it comes to digging coal, or any other class of work.

(*Mr. Smillie.*) You find some of the men are very sharp and clever?

(*Mr. McPhee.*) Some who have been 18 months in the country can speak fluently. Usually when you get a man of that stamp he does not stay long.

(*Dr. Haldane.*) Do you come from German territory?

(*Mr. Ymities.*) I come from Russian country.

(*Mr. Smillie.*) All your countrymen are from Russian Poland?

(*Mr. Ymities.*) Yes, all the same. It is the same country. There is a different set.

(*Mr. Smillie.*) You have more freedom here than you do at home?

(*Mr. Ymities.*) Yes.

(*Mr. Smillie.*) A good many of your countrymen come here in order to avoid serving in the army; they do not want to serve in the Russian Army?

(*Mr. Ymities.*) No, they do not like to go soldiers.

(*Mr. McPhee.*) I think the Germans are the worst, they come away more to save conscription.

Mr. JAMES BROWN, called and examined.

Mr. James Brown.

22928. (*Mr. Smillie.*) You have had considerable experience as an underground worker?—Yes, 29 years.

22929. You are President of the Ayrshire Miners' Association, and have been for a number of years. I think you are now an agent or collector for the Ayrshire Miners' Association?—Yes.

22930. You worked continuously underground for 29 years?—Yes.

22931. Has your experience been confined to Ayrshire?—Except once or twice in Lanarkshire, once at Hamilton and once near Old Flemington.

22932. You have worked in other collieries outside?—Yes.

22933. You understand fairly well general mining as applied to Scotland?—I ought to.

22934. Do you know by sight all the mines inspectors for the West of Scotland, from seeing them inspecting the mines?—I never happen to see any in the mines except Mr. Mottram. I know the Chief Inspector.

22935. Mr. Ronaldson?—Yes.

22936. During that 29 years have you met Mr. Mottram or any other inspectors making inspections underground?—Only once that I remember.

22937. In the whole of your experience?—Yes.

22938. You have been a miner during the time of a considerable number of inspectors. There has been a considerable number of changes during those 29 years?—Yes.

22939. Mr. Ralph Moore at one time was Chief Inspector while you were underground, for many years?—Yes.

22940. Did you ever see him?—No.

22941. As a matter of fact you have only seen one inspector underground?—Yes.

22942. Are the collieries in Ayrshire better conducted? Are the ventilation and general conditions better than elsewhere?—I should not say they are.

22943. Do you think more frequent inspection is required?—Yes, certainly much more than I have been in the habit of seeing.

22944. Has inspection by Government inspectors tended to greater safety underground?—Yes.

22945. Do you know whether or not the mines managers are given notice of a proposed visit by the inspectors?—I have always considered so, because I never happened to know of an inspector being in the district except when an accident has happened.

22946. When an accident has happened they naturally know an inspector will be visiting?—Yes.

22947. Have you heard of visits by the inspector to the mines when considerable preparation has been made?—I have known that preparation was made after an accident. I never knew of another visit. There may have been one.

22948. You do not know of any surprise visits other than those where accidents have taken place?—No.

22949. You think that there might be considerable increase in the number of inspectors, and that there should be more surprise visits?—I think so.

22950. You have had a long experience of pit firemen?—Yes, I have worked under them all that time.

22951. You have known a considerable number from first to last?—Hundreds.

22952. Are they usually a fairly capable class of men?—Sometimes, but were I a manager I would not care to employ some of them.

22953. You do not think they are the very best class of men to be found in the mines?—Occasionally, but certainly not very often.

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22954. Not as a rule?—Not as a rule.

22955. You have not very much explosive gas in Ayrshire?—Yes, in my own particular district.

22956. Annbank?—Ayr Colliery.

22957. It is worked with safety lights?—Mostly. Soft coal always.

22958. A fireman in a case of that kind would require to be a very competent person to look after the safety?—He ought to be.

22959. Have you had any explosion at Annbank Colliery?—We have had slight explosions. Nine years ago we had an explosion at Drumlee Pit, in which seven lives were lost—I should think about nine years in September.

22960. We have been told that the firemen in Ayrshire are not very well paid. They are paid 5s. 4d. to 6s. 6d. a day?—That is so. That is about the average. In the Colliery just now I think it is about 5s. 10d.

22961. You do not think that is a wage which would encourage the best class of men?—You cannot get them at the wage, generally speaking.

22962. You cannot get good men at that wage?—It is not to be expected.

22963. Do you consider a fireman a very important official about the colliery so far as safety is concerned?—Yes.

22964. Do you think that the best class of men should be chosen for work of that kind?—I do.

22965. You favour the holding of an examination and the granting of certificates of competency?—Yes.

22966. You think that everything should be done that can be done to prevent accidents at wheel braes, and arising from continuous haulage?—Yes.

22967. You think that something more than is done now might be done and might be made compulsory?—Quite easily.

22968. We had before us the question of runaway points to prevent accidents on braes, and a continuous chain over the top of a train of trams, so that if a breaking of a coupling or a draw bar takes place, it might prevent a runaway. You would favour those things being made compulsory by law?—Yes.

22969. Do you think it would lead to a lessening of the accidents arising from haulage?—It certainly would.

22970. Many of those accidents which take place now could be prevented if the appliances which we know of were made compulsory?—That is so.

22971. Most of those appliances might be provided at a trifling cost?—Very little.

22972. There is nothing that is proposed to prevent haulage accidents which would be prohibitive so far as the price is concerned?—No.

22973. Have you heard of accidents occurring to men sometimes in the night time or at other times during the day when they were working in an isolated position and no person near them?—I have known one or two accidents to the men at the coal face working singly. I have known other cases where a very serious accident might have happened to the man, only he escaped providentially one might say.

22974. You do not think it is a good thing that a workman should be working alone at night time, or in any isolated part of the pit? If an accident takes place which might not otherwise prove fatal, it may from the want of assistance?—Yes.

22975. In Scotland there have been a considerable number of men who have lost their lives who were proved afterwards to have lived a considerable time and died because they could not assist themselves?—Yes.

22976. Do you think it a wise precaution that two men should be employed together where they are isolated, or working in the night?—I think it should be compulsory.

22977. Dealing with the introduction of any new explosive here, as to whether a change of explosive should be brought to you, you say it is desirous that the workmen should have a voice in saying if there should be a change, and what explosive should be used?—It comes hard on the men who have changes sprung upon them, as I have seen at times.

22978. You will admit that the explosive which is proved by experts to be the safest possible explosive is the explosive which should be used?—Certainly.

22979. You would not allow anything to stand in the way of safety?—Certainly not.

22980. Do you think the explosives the men use are changed from time to time without their being in any way consulted about the matter?—That is so.

22981. It is not always beneficial?—I have thought so many a time as a practical miner.

22982. You advocate that there should be drinking water provided in the mine for the men?—Yes.

22983. It is the case that men often in our Scotch mines have to go all day unless they carry water with them. They cannot get water unless they run the risk of drinking water that should not be drunk?—Yes.

22984. You think it would not cost very much to put water in?—No.

22985. (*Mr. Ratcliffe Ellis.*) Upon the question of the inspectors, do you suggest that there should be an increased staff of Government inspectors?—Yes.

22986. What is your view as to how often a pit should be inspected by the Government inspector?—I have not thought carefully out as to how many inspections, but a great many more might be made than are made.

22987. Do you think once in every six months every pit should be examined?—I think six months would be rather a long period.

22988. They say at present in Scotland that they examine each pit once a year, at any rate six months is not often enough?—I think not.

22989. How often would you think?—At least once a quarter, I should think.

22990. Do you think it would be necessary to examine all the pits every quarter, or might some not be examined so frequently and some more frequently?—Of course an inspector knows his district and his pits, and some mines might be advantageously examined more often than others.

22991-3. Would you leave that to the inspector's judgment, as to how frequently he should examine?—It would depend upon the inspector.

22994. That is a little awkward to work out?—It might be, perhaps.

22995. Assuming an inspector was a competent man, give him credit for competency, would you leave it to him to say how frequently he should visit the pits in his district?—No, I think it ought to be compulsory that a visit should be paid at a stated interval, and not less than——

22996. Not less that once a quarter?—Yes.

22997. What do you mean by a "visit"? Do you mean he should go through the whole of the mine, all the working parts?—Why not.

22998. I am asking you. I do not want you to ask me questions. When you say he should visit it do you mean that he should go through the whole of the working places of the mine?—I think he ought.

22999. You are actually engaged in mining now?—No. I have not been at the coal face for about three years.

23000. When you did work what were the number of men employed underground in the mine where you worked?—The last pit I worked in there were about 250.

23001. That is not a very large place?—One of the largest in Ayrshire.

23002. How long would it take one man to make such an inspection as you consider ought to be made of the whole of the working places in the mine, and the whole of the mine where inspection ought to be made?—He might do it, if he cared to work long enough, in one day, or a day and a half.

23003. What distance would he have to travel?—It would depend upon the age of the mine.

23004. In the mine you worked in?—Do you mean the whole of the area of the mine?

23005. What you say ought to be inspected. What would satisfy you?—Taking everything into account, perhaps about 2 miles or 2½ miles to cover everything.

23006. That would cover everything?—I could not swear to that.

23007. Do you think about 2 or 2½ miles would cover the whole?—Yes.

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23008. Would that cover all the travelling roads, the airways and working places?—It would, nearly. I am thinking more particularly of the mine I worked last at.

23009. I am speaking of that. What distance is the furthest place from the shaft?—So far as I remember, about 800 or 900 yards at that time.

23010. That is getting on for over half a mile. That is one road, and that is the main road?—Yes.

23011. What area of faces have you open?—The area is not large. There are two or three sections worked.

23012. Do you think that you are right in saying 2½ miles?—I would not swear to that, as I have told you.

23013. It might be double that?—I do not think it would be double, but it might be considerably more.

23014. How many firemen are employed there?—There are four firemen.

23015. For the whole pit?—Yes. Excuse me, there were seven firemen; four firemen for one seam, and three for the other.

23016. The whole of the pit is only 2½ miles to travel?—I do not say it is only 2½ miles; it might be considerably over. I would not like to say.

23017. I am talking of the time when seven firemen were employed?—Yes.

23018. I want to know the distance these seven firemen had to go. If 2½ miles would take them all over the place.

23019. (*Mr. Enoch Edwards.*) Had you both seams in your mind when you said 2½ miles?—I was thinking of one seam.

23020. (*Mr. Ratcliffe Ellis.*) I want to know at the colliery at which you were working the length of time it would take an inspector or a person making an inspection of an extent as you say ought to be made to make that inspection?—It is not difficult to count up when you know the time each firemen takes. It is not difficult to multiply that by four, and then you would find out the time.

23021. Do you still think that one day or a day and a half would enable you to make the inspection of the pit?—I should think so. I should not be afraid to do it.

23022. What do you suppose you would gain in safety by these more frequent inspections—these periodical inspections by an inspector?—I should say if an inspector was there he would see when any infringement of the Coal Mines Regulation Act was taking place on the part of the officials.

23023. He could only see that when he was there?—Yes.

23024. That would not be much use?—There is not likely to be an infringement under the nose of the inspectors?—If he came unexpectedly he would see it.

23025. I am speaking of periodical visits?—Well.

23026. Do you not think if you saw the condition of a mine to-day and the condition of its management, whether it was slack or good management, that it would give you an idea of the condition of the mine?—Yes, I do.

23027. An inspector or you yourself, if you went down over part of a pit and saw it was satisfactory and smart, would conclude that was satisfactory and take that as a sample?—Not on the first visit—perhaps after once or twice.

23028. The inspectors know their pits?—Yes.

23029. Knowing the pits, having been down before and seen the condition at one part, it would give you an idea as to what the whole of it was like?—It might.

23030. Do you suggest that the firemen should not be discharged by the manager?—I do.

23031. You would not extend that protection to the manager—you would allow the owner to discharge the manager?—I should think I would.

23032. And under-manager?—Yes.

23033. But the fireman is not to be discharged?—No.

23034. When he is once appointed he is practically appointed to that pit for life, unless he wants to go away?—Not necessarily.

23035. How would you get rid of him?—If he was infringing any bye-laws of the Act he might be got rid of in that way.

23036. Supposing the manager thought he was unsuitable for the job, how would you enable the manager to get rid of him?—I would not give him that power.

23037. If the fireman is an unsuitable man how can the manager get rid of him?—A manager might, if he were unsuitable and gave him trouble.

23038. Supposing, rightly or wrongly, he thought so, how do you suggest that he should be able to get rid of him?—I should not suggest that he should be able to get rid of him at all.

23039. He cannot get rid of him?—The manager could not.

23040. How can he be got rid of?—Unless he gave proof that he was.

23041. Who must the manager give proof to?—Make him a Government official.

23042. Supposing he is not a Government official, but appointed by the manager, and the manager wants to get rid of him, you say he must prove that he is an unsuitable man?—Yes.

23043. Who is he to prove it to?—I do not think it would be difficult to have some Court of Arbitration to take it to.

23044. Would you establish a new court, or is there any court in existence?—I do not think there is any.

23045. You want a new Court of Arbitration to try whether a fireman was fit for his work before he could be discharged?—Nothing elaborate; something that the manager would be able to say, "Here is an incompetent fellow."

23046. I want to know rather more about it. Who would, in your view, appoint the arbitrator; would they each appoint a man, the manager and the fireman, and the two appoint an umpire?—How would it be for the chief inspector along with one or two others?

23047. Have you not thought this question out at all as to how you would carry out your scheme?—I have not given it a great deal of thought. It looks to me as if it could be quite easily done.

23048. If you prevent the manager getting rid of a fireman that he considers incompetent, would you relieve the manager from the responsibility of any accident which happened in consequence of that incompetency?—I would not prevent the manager altogether, but he should be able to prove something against the fireman before getting rid of him.

23049. Supposing there is a difference of opinion between the fireman and the manager, and in the interval before the time the Court of Arbitration deciding that this man is to go away an accident happens in consequence of this man's incompetency or negligence, would you relieve the manager from the consequence of that accident?—You would have to relieve him if you took away the power.

23050. Do you think it would conduce to safety to relieve the manager from the responsibility of the safety of the pit?—I do not understand the question.

23051. Your scheme would necessarily relieve the manager from responsibility because you prevent him having control over his officials. You recognise also that it would be reasonable in that case?—I did not say altogether that the manager should be relieved from the full responsibility.

23052. If you prevent the manager appointing his own people and discharging them and appointing others——?—I mean, indiscriminately.

23053. If you say he is not entitled to do that, is it not right that you should relieve him from the consequences of these people's mistakes?—Yes.

23054. Do you think that it would be conducive to safety that you should relieve the responsible manager from the consequences of a violation of the law by a man he appointed, but whom he could not discharge, who was proved to be incompetent?—I really do not follow you.

23055. Would that be conducive to safety, to make that alteration?—I do not follow you. I do not know what you want to be at.

23056. Never mind what I want to be at. Will you answer my question. You will see what we want to be at after we get it down. At the present time the manager of a mine is responsible?—Yes.

23057. If he appoints an incompetent person he is responsible?—Yes.

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23058. If you prevent him getting rid of an incompetent person you ought not still to hold him responsible. That is true?—Yes.

23059. Now I ask you if you consider such a change would be conducive to safety by relieving the manager from the responsibility put on him by the Act?—I think it would.

23060. I did not follow about no person being allowed to work alone. The fireman is alone in working his rounds?—Yes.

23061. Would you have someone going with him?—No.

23062. Why not? If anything happens to him who is to look after him?—It is a different thing making an inspection alone.

23063. Supposing anything happened to the fireman, there is nobody to assist him?—That is true.

23064. Would you have two men?—No.

23065. What class of labour is it you would not allow to work alone?—I would not allow a face man to work alone.

23066. Is it usual for a face man to work alone?—Yes.

23067. Has not he a drawer?—The drawer is very seldom there.

23068. He is with him except when taking the coal to the shunt?—That occupies most part of the day.

23069. If a man was getting coal, a man and his drawer, would you require another man in the place on the chance of something happening to the collier, and also a man with the drawer going to the shunt?—I would have a man at the face, but not a man with the drawer.

23070. An accident might happen to him?—There are many drawers on the way.

23071. Are there not many men in the face?—Working stoop and room they are sometimes a considerable distance off.

23072. How far away would you have the man looking after the collier at the face?—I think they ought to be working double at the coal face.

23073. Is that a new system altogether?—No.

23074. There should be no working at the coal face unless there were two sets of men?—Two individual men, I mean.

23075. There are two men, the collier and the drawer. You think that a working man should not be alone at the face?—I do.

23076. If it is one man's job do you suggest that there should be two men there?—No, one to work alongside with him.

23077. With regard to the explosives, you say you think the men ought to have a voice in the explosives used?—Prior to the introduction of new explosives.

23078. Are you speaking now of high explosives?—Yes.

23079. You know that there is an Explosives Order in which those which are considered to be safe after very careful tests are put down in the list?—Yes.

23080. Some are more expensive than others?—Yes.

23081. There are different opinions as to whether one is better than another in the way it does its work?—Yes.

23082. If the explosive is not safe it is not put on that list?—No.

23083. If it is safe then it is put on the list, after being tested by some exceptionally able men?—Yes.

23084. Why should not a coalowner and employer have the right to select any of those explosives which he thinks fit, after being specified as safe?—There is no reason that he should not, but an indication ought to be given to the men or their representatives, so that they also might have a voice. As practical men they know the explosive that blasts a certain seam better than others.

23085. Do you propose that they should be entitled to prohibit any explosive being used?—No, I do not.

23086. What is the object of intimating to the representatives of the men the explosive you intend to use if they are not to have an opportunity—— ?—You mean individual explosive?

23087. Yes?—I think in some cases a less expensive explosive might be used.

23088. Where the collier has to pay for his explosive you want the cheapest explosive?—No.

23089. You say a less expensive explosive?—A more suitable explosive for the seam worked at.

23090. Did you not say a less expensive?—It might be, and more suitable also.

23091. As to the suitability of the explosive, is not that a question for the management? It must be a safe explosive if on the permitted list. Why should not the manager have sole discretion as to which of these explosives he would use?—Because men working with explosives sometimes know far better than a manager what is suitable for a seam.

23092. With reference to the explosive, the seam may be worked better with it, and you may get more round coal. There are various grounds upon which a manager might select one explosive. Why should not he have that right?—Because he does not know as well as the men.

23093. Should he not have an explosive the men did not approve?—I think there should be a conference.

23094. Supposing the manager is entitled to have the explosive, what is the use of discussing it with the men? You do not say that he should not be entitled to use the explosive except with the sanction of the men?—No.

23095. If he is entitled to use it whether the men like it or not, what is the use of discussing it with the men whether he shall use it or not?—I am thinking about the explosives the men use themselves in getting coal.

23096. Do you want them to select their own?—No, but I want them to be able to have a voice before the introduction of any new explosive.

23097. What voice do you mean? It is one thing to say a new explosive shall not be introduced without the sanction of the men?—Yes.

23098. You do not go so far as that? If the manager is to have the responsibility of selecting them, what use is it discussing it with the men?—If the manager is to have the responsibility.

23099. He cannot escape the responsibility, and you would not prevent him doing it. It leaves to him the right to introduce the explosive?—Yes, but the men might be able to point out that it would be better for him and them all.

23100. They can now?—It is not compulsory in the meantime.

23101. Would you make it compulsory?—That at least a conference should be held.

23102. What is the use of a conference; the owner is responsible, and he has a number of explosives certified as being safe. You do not say he should not be entitled to select one without the sanction of the men, but that before he selects it he ought to consult the men. Why?—To arrive at the best explosive suitable for the mine being worked.

23103. The manager of the mine considers that he is competent to do that himself?—But he is not always.

23104. Is it not usual for the men to take drinking water down with them?—It is very common.

23105. Do you want to stop that?—No, but I want to provide a little water for men who cannot get it otherwise.

23106. Have you made any calculation as to what it would cost?—No, but I am sure it would be very inconsiderable.

23107. You want to supply pipes in various parts of the mine. At some of these collieries there are a thousand men underground, and the workings are very considerable?—Yes.

23108. Would you pipe the whole of these workings?—The pipes could be taken in the main roadways and to a suitable centre where the men could get at them.

23109. You have no idea of what the cost would be of putting in and maintaining pipes and supplying water?—I am always thinking of our own mines. I am under a disadvantage.

23110. In your mines it would not be expensive?—No.

23111. You could not say what the expense would be in a large colliery?—No.

23112. (*Dr. Haldane.*) Do you propose to take water to the working face?—No.

23113. Where do you propose to take it to?—To lyes where the men are in the habit of coming.

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23114. These are usually for the working face. They might be a long way from the pit bottom?—It would be a considerable distance from the pit bottom; it would be to obviate the disadvantages of going there.

23115. Some of the suggestions we have had from the previous witnesses seem to me rather to throw doubts on the competency of the managers?—Yes.

23116. Do you think that the qualifications of managers in Scotland, so far as your experience goes, are insufficient?—If I were an employer I would not employ some of them, they have very little experience.

23117. You think that the qualifications of some of them are insufficient?—I do.

23118. Do you think that the examination does not give sufficient guarantee of their competence?—I do not think so in every case.

23119. On this question of explosives you said that the managers often did not know?—I have said they did not know so well as a man who has been working 20 or 30 years might know.

23120. It is the business of a manager to know and find out and get what evidence he can —Yes.

23121. A competent manager would do that?—Yes, very likely he would.

23122. I suppose it means some managers have not had sufficient practical experience of explosives, they do not know enough about them?—They might have had their experience in a different mine to the one in which they were working at that time, and there is a very material difference in the mode of blasting coals.

23123. Do you know any mines where water is provided by the management by pipes?—No.

23124. Have you ever heard of such a thing?—No.

23125. I only know one in Cornwall. So far as my experience goes the miners always provide their own drink—water or tea?—It is usual. It is very hot in deep workings.

23126. So would the water be through the pipe?—It would not deteriorate so quickly as in an open can.

23127. I think it would more quickly myself. However, that is one difficulty. It is a simple solution of the difficulty for the miner to take what he wants, and I think it is the usual solution. It would not meet your point unless the water was carried to the working face?—To the lyes.

23128. That is near the working face?—Sometimes they are a considerable distance off.

23129. Still, it would not meet your point to bring it only to the bottom?—I would like it further in, because thirsty men drink water very unsuitable for them.

23130. That is very bad, but I think they ought to take sufficient water for the day with them, or have it carried in. Have they any means of keeping the water cool; do men do anything to keep the water cool that they take in?—Nothing that I know of—they put a little oatmeal in it.

23131. That will not keep it cool, they have no kind of vessels that will keep the water cool by evaporation?—No.

23132. They could do that usually in a colliery in the same sort of way they do in Egypt. I want to know about ventilation in your part. I do not think you have said anything about that?—No.

23133. Do you think the ventilation is fairly satisfactory as a rule in Ayrshire?—I have heard many complaints. I cannot complain of my own particular colliery—it is fair.

23134. The colliery you know best had a good deal of gas in it?—Yes, that pit at least.

23135. For that reason it would be necessary to have good ventilation?—Yes.

23136. Have you heard complaints of black damp?—I have worked in black damp.

23137. Do you find it unpleasant to work in?—I do, surely.

23138. In what way?—For one thing, nobody would dare to say it was not inimical to health, and there was always drowsiness if one worked where black damp was near. It always knocked one off his feet.

23139. It did?—As a rule.

23140. Did it affect the burning of the lamps?—Yes.

23141. Did it ever give you a headache?—Yes, after a day or two. I have vomited after it, too.

23142. Are you sure that was just black damp and not gases from powder?—No, it was black damp.

23143. Or heating of the mine?—Black damp was the principal thing that caused it.

23144. Did it make you short of breath at the time you were working? Did you ever notice that?—I cannot say I did personally, but I have heard men complain it did.

23145. I mean, at the time of working, did it make it necessary for you to take a deeper breath than usual?—I suppose that would be usually the case among black damp.

23146. That is the effect it had on me. Anyhow, you are of opinion that that ventilation is not altogether satisfactory at present in some mines?—I am. In any mine, indeed, you come to working places where it is very bad. That is, perhaps, driving a place to get through for air. The men have to put up with very much.

23147. Chiefly black damp?—No.

23148. Fire damp?—Simply lack of ventilation and powder smoke. Black damp is usually confined to workings that have been stooping for a time.

23149. Have you ever considered the question of the desirability of providing means for changing pit clothes and washing at the pit head?—I have looked at it as an ideal, which it is very desirable to be obtained.

23150. What is the feeling of the miners in your district on that subject? Has it ever been considered?—No; I think the men ought to be educated up to it.

23151. You are of opinion that it is desirable?—Yes.

23152. Does it cause much inconvenience at home when the men come home in their dirty pit clothes?—It causes a considerable amount of inconvenience which varies according to the nature of the dwelling-house.

23153. Are there many one-roomed miners' houses left in your district?—Yes.

23154. There are some?—75 per cent. of them are one-roomed, except the buildings that have gone up lately.

23155. Would you estimate it at 75 per cent.?—In the village of Annbank 75 per cent. of them are single dwellings.

23156. (*Mr. Smillie.*) That is the village you have lived in?—Yes.

23157. (*Dr. Haldane.*) Who built those houses?—They were built about 50 years ago by contract.

23158. Are there no other houses which are available?—Excepting a considerable distance out, but there are very few. I should say that over an area of 5 miles there are not two spare houses available outside the colliery houses.

23159. You mean outside these one-roomed houses?—Yes; in the village there are several at the ends of blocks, but over 75 per cent. are single houses, or were until quite recently.

23160. That is to say, they are houses with one room in them?—Yes, kitchen or whatever you call it.

23161. I suppose it is a good big room, but there is no means of dividing it up?—You could not very well divide it up. There is a little change coming over them—they have been built lately a little better.

23162. The pit clothes have to be dried in that room?—Everything has to be done there.

23163. Any washing has to be done there?—Now, in my district wash-houses are provided outside, but until 12 years ago everything had to be done there.

23164. I mean when the man comes home?—He must wash there.

23165. That is the only place he has?—Yes.

23166. (*Mr. Enoch Edwards.*) First of all, with regard to the question of explosives which Mr. Ellis has been asking you about. Generally Ayrshire is not a gassy coalfield?—No, but as they are going deeper it is becoming so.

23167. You largely use naked lights?—Yes.

23168. We have had it in evidence this week?—That is so usually in Ayrshire.

23169. When you were expressing your opinion to Mr. Ellis on the question of explosives, and the work-

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men's right to have some say in the matter, had you in mind explosives used in pits where naked lights are used ?—Yes.

23170. That is to say, it is a question in the opinion of the men as to which type of explosive gets the best coal ?—Yes.

23171. It is only on those grounds ?—Yes.

23172. If you have a very fiery mine and it is a question of putting an explosive in—one of the permitted explosives—you do not suggest that the men should have a right ?—No, I had in mind where the men were put to unnecessary expense where there was no gas.

23173. The men of Ayrshire were never unreasonable if it was going to incur greater risks to the men ?—No.

23174. It is only where gunpowder may be used with naked lights, and it is in these cases that you think the men should have some voice in the matter ?—Yes.

23175. Have you had much experience of the men being fined for a breach of the rules ?—Yes. Do you mean taken to court ?

23176. No, fined in the colliery office ?—There were one or two within a year or two, but they are largely taken to court now. We have no system of local fining.

23177. I may take it that harmonises with the views of the men ?—Yes.

23178. They deprecate fines in the colliery office ?—Yes.

23179. It is not practised much in Ayrshire ?—I do not think so; it is not in my own particular district.

23180. In your judgment would it be wise to abolish it altogether ?—I think it would.

23181. Do you think that discipline should be maintained by taking men to the court where the charge could be made rather by fining in the colliery office ?—Yes.

23182. (*Chairman.*) On the question of explosives I think we understand the position. The explosives you were talking about are used in naked-light collieries ?—Yes; may I explain this. I have seen bobbinite introduced where gunpowder could have been used because of the perfect safety of the mine. That is what I am thinking about.

23183. Still, the responsibility remains on the manager. The men and the manager may differ as to whether or not one explosive may be cheaper and may be a little more dangerous than another, but if anything happens the responsibility is always on the manager ?—Yes.

23184. It is not on the workman. He should have a good deal to say with regard to what explosives should be used. Do you not think so ?—Yes, but still I think there ought to be consultation where a mine is perfectly safe, in any event.

23185. We know that naked-light collieries are much safer than safety-lamp collieries. I think Mr. Smillie has told us that you cannot always be certain because a colliery is worked with naked lights that you will never get an outbreak of gas ?—Neither you can, especially with stooping places; it may come at any time.

23186. I do not think it comes under this inquiry, but this occurs to one with regard to these one-roomed houses you speak about. Is there any public authority that takes any note of overcrowding ?—I never heard of any steps being taken by any authorities. Of course there are authorities we might apply to: we might apply to the County Council, or the County Medical Inspector, but I have never known of anything being done in that way.

23187. The houses which are being built now are better ?—They are all two-roomed houses.

23188. (*Mr. Smillie.*) What population has the village of Annbank ?—1,200 to 1,300.

23189. Would there be six wash-baths in that village —places where the men could wash ?—There is not one.

23190. You do not think there is one in that village ? —I am sure there is not one, except it is a portable one.

23191. There is no opportunity of a miner getting washed all over his body unless he does it in his house ? —Or goes to the river.

23192. Dr. Haldane said that the single apartment was pretty large; 14 ft. square is the largest, I think ?—Not much over that—perhaps a little; they are two-bedded rooms.

23193. They are 14 ft. square, and there are, say, two beds 6 ft. long each and 4 ft. wide ?—Yes.

23194. That is taken off 14 ft. of space ?—Yes.

23195. It is not an uncommon thing to have a man and his wife and five children in one of those single apartments ?—That is very common.

23196. It is not an uncommon thing for a man and his two sons and his wife and other little ones to be even in a single apartment ?—I have known of cases, but our employer there tries to obviate that as much as possible —that is to say, he takes regard to the number of the family, and tries to give double houses to the men.

23197. (*Dr. Haldane.*) Is there a county Medical Officer of Health ?—Yes, Dr. Macdonald.

23198. (*Mr. Smillie.*) Supposing attention was called to the fact that a family of seven persons, man and wife and five children, were living in a single apartment, and the medical officer visited there, he would not find fault ? He has no right or power to find fault ?—I do not think so.

23199. It is a common thing for families of that kind to be in single apartments ?—Yes, it is a common thing.

23200. The manager or the owner endeavours to arrange, when the family comes to be working young men, to give them the double ends as we call them ?—Yes, and they go further than that where the lease of the estate allows it, and they give him extra rooms. The owner cannot do everything, because he has not the room to do it.

23201. On the question of baths there is not a strong feeling among the miners just now, but you say that they should be educated up to it ?—Yes.

23202. Do you think it would be in the interests of health that they should be clean and be able to wash at the pit ?—Surely it would.

23203. It cannot be good for their health to have two or three suits of pit clothes drying round the fire where the people are breathing the fumes ?—It cannot.

23204. That is the case where there are two even in the kitchen ?—Yes.

23205. Do you think that it would not be a great expense to provide drying and bathing accommodation at the pits ?—I think it would not.

23206. Do you think the miners would seriously object if they were required to pay a small tax even to assist it being done ?—I do not think they would.

23207. Do you think it would be such an alteration that the miners' wives would universally thank Parliament if it were passed into law ?—I think they certainly would.

23208. They are the greatest sufferers ?—Yes.

23209. (*Chairman.*) With regard to these baths, how many baths do you think would be necessary ? In some pits where there are many men, a shift would consist possibly of hundreds of men coming very quickly after one another ?—Yes.

23210. 200 or 300 perhaps ?—Yes.

23211. How would you provide bathing accommodation for 200 or 300 men at once, or within a reasonable time ?—You could provide a sufficient number of baths.

23212. That would mean you must have as many as 200 baths in some pits ?—It might mean that, but the sanitary authorities might be the ones to say the number of baths.

(*Chairman.*) Providing 200 baths would be rather a considerable business at the pit mouth, or anywhere close.

(*Dr. Haldane.*) What are wanted are shower baths. It is done with shifts of over 1,000 men. I have seen it at various mines.

23213. (*Chairman.*) There must be 1,000 separate baths ?—No.

(*Dr. Haldane.*) They go into the place as they come up in the cages, and they are done in a very short time. Warm water is always running.

(*Chairman.*) How many would be in a cage —16 ?

(*Mr. Smillie.*) 4 to 16.

(*Chairman.*) How quickly do the cages come up ?

(*Dr. Haldane.*) There are a lot of men in the place at one time.

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Mr. James Brown

13 June 1907

(*Chairman.*) Is there any serious complaint where 1,000 men go through the baths one after another of their having to wait a long time?

(*Dr. Haldane.*) No, they have very little waiting. Each man is actually under the shower for a very short time.

(*Chairman.*) Directly he is out he goes and dries elsewhere?

(*Dr. Haldane.*) He comes out and gets his clothes.

23214. (*Chairman.*) With regard to the qualifications of managers, you say you think it is insufficient. I mean that the examination is insufficient. Have you any suggestion to make as to the examination? Do you think that it ought to be a more practical examination?—I did not say that qualifications of all managers was insufficient. I said that some were.

23215. You said that the qualification of managers was insufficient?—Some only.

23216. A man may become a manager without having sufficient qualifications?—I said that some managers, in my opinion, were not qualified as they ought to be.

23217-20. That is to say, a man is capable of becoming a manager, and does become a manager, although, in your opinion, he is not competent to become a manager?—Yes.

23221. We have it in evidence that a man has been considered to comply with the requisition as to practical experience if he has worked as a surveyor?—Yes.

23222. You think that would be wrong?—I do.

23223. You consider that the statutory qualification for a manager before he can sit for an examination ought to be made stricter, and that the five years' experience which is required should be a practical experience underground?—Yes.

23224-5. And that he should have been underground himself, that his occupation must have taken him underground for a large portion of that five years?—I say so. I understood that was the practice in Scotland just now.

23226. Is there anything more you would like to say to the Commission?—No, except on the question of managers. I think that a manager ought to have more practical experience, but a man might have 20 years' experience, and be able to take a certificate, and not be a very competent manager after all.

Mr. WILLIAM ADAMSON, called and examined.

Mr. William Adamson.

23227. (*Mr. Smillie.*) You are Assistant Secretary of the Fife and Kinross Miners' Association?—Yes.

23228. You have had a considerable number of years' practical experience as an underground worker?—27 years.

23229. In practically all classes of mining work?—Yes.

23230. You understand fully mining so far as Fife is concerned?—Yes.

23231. Mining is extending very rapidly in Fife?—Yes.

23232. There are likely to be greater developments in the future?—Yes.

23233. You have nearly 20,000 persons employed in and about the mines?—Fully 20,000.

23234. The developments which are taking place now are chiefly in strata which are lower-lying than it has been usual to work in the past?—Yes.

23235. You are going deeper for the coal?—Yes, very much.

23236. Some of the new collieries give off a considerable quantity of gas?—Yes.

23237. You were comparatively free up to recent years?—Up to within a few years.

23238. We may take it from you that the development of those new collieries under what may be looked upon as more dangerous circumstances will require greater care than may have been used in the past?—Yes.

23239. And wider experience, so far as the management of the mine is concerned?—Yes.

23240. Because of new dangers?—And I think, in fact, the whole of the officials.

23241. Do you think there may have been men holding the very important position of firemen in the collieries in Fife in the past who would not be qualified to hold the same position under the newer conditions unless they had some previous experience?—I think there are men now.

23242. Holding the position of firemen?—Yes, in Fifeshire—who would not be suitable for holding that position in some of the mines that have been developed lately.

23243. How long is it since you left the pit?—Four years.

23244. You were working up to four years ago?—Yes.

23245. Do you know whether or not the present system of inspection by Government inspectors is considered effective so far as the thorough examination of the mine is concerned?—I do not think it is at all adequate.

23246. Have you seen any general inspections of the mine in which you were employed carried out during your 27 years' experience?—I only saw the Government inspectors twice underground during my 27 years experience, and they had been sent for specially on both occasions.

23247. Because of a complaint?—Because of a complaint as to the state of the ventilation.

23248. You do not complain that they do not pay attention to any complaints made?—No.

23249. They are very attentive but they do not perhaps make a thorough examination of all the mines under their charge?—In my opinion it is absolutely impossible for the number of men at present.

23250. It is not done now we may take it?—No.

23251. Do you think that there should be a thorough examination of the mines made periodically?—Decidedly.

23252. Would you say once every three or four months would be sufficient?—I should say it should be done at least twice every year.

23253. That is a thorough examination of each mine?—Yes.

23254. In addition to that, there should be surprise, visits made where the inspector has any reason to believe that the Coal Mines Regulation Act is not being carried out?—Yes.

23255. Are you aware that that would make a considerable addition to the number of inspectors?—Yes.

23256. Are you favourable to the creation of a new class of assistant inspectors, or would you merely increase the number of the present class of inspectors?—I think that in making any additional appointments it would tend to greater efficiency in inspection if more regard was had to practical experience.

23257. At the face or underground?—In all classes of underground work.

23258. Practical experience should be one of the qualifications necessary?—Yes.

23259. Would you propose, in setting up a class of inspectors, that one of the qualifications for holding certificates should be that they had been practical men?—Yes.

23260. Would they be a lower paid class of inspectors, or would you make them the same class as the present assistants?—I think I would make them the same class as the present assistants.

23261. Would you increase the present number of chief inspectors or make their district smaller? Are not their districts pretty wide at the present time?—I think the one for the East of Scotland covers 23 counties.

23262. If he is doing very much examination he must be a considerable time on his journey to and from the places?—Yes.

23263. Do you think that it would be better if the districts were smaller and there were a chief for each of the districts?—Yes.

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23264. I suppose Fife would be large enough to be covered by a chief and some assistants to do it in the way you want it to be done?—If done in the way I would suggest there would be one Government inspector for every 10,000 persons employed, which would mean that we should have at least two inspectors resident in Fifeshire.

23265. Do you think if there were two inspectors resident in Fifeshire, responsible for the examination of the Fife collieries, that it would be physically possible for them, supposing they devoted their whole time to it, to make an examination of all the collieries in Fifeshire twice a year?—The examination they could make under circumstances such as that would be very much superior to what is in practice now.

23266. It would be better than the present?—Yes, very much better.

23267. I am afraid it would not enable them to make the examinations which you want made. With regard to the inspection under Rule 38, you are aware that the men have a right to appoint two persons who are practical miners to make an inspection. The only alteration you think that is necessary in this rule is "are or have been practical miners"?—Yes.

23268. You want the men to have the right to appoint people who have been practical working miners, and who at the moment are not employed?—Yes.

23269. You think that that would tend to this rule being more largely taken advantage of?—Yes.

23270. And would make the rule more effective. The men could appoint men who would be independent of the employer, such as the check-weighers?—Or the Miners' Union officials.

23271. Whether or not the fear is well founded, there is a fear at the present time on the part of the workmen if they make this examination and give an adverse report that they will be unfairly treated?—Yes.

23272. It would be very difficult to prove that there is anything in that?—It would be very difficult, although I have no hesitation in saying that the fear exists and is the chief cause why it is not taken advantage of.

23273. Do you think that there should be any change in the position of the colliery firemen, and that they should hold certificates of competency?—Yes, I think they should.

23274. Do you think that the best class of man is elected at the present time for those positions?—No.

23275. What wages do they pay the firemen in Fifeshire?—There are various wages paid. Within my knowledge they are being paid from as low as 5s. 3½d. per shift to 6s. 9d. per shift.

23276. Are they likely to get a good, competent, intelligent man for 5s. 3½d. per shift?—It is absurd to expect it, when the average wage in the county is somewhere in the region of 7s. a day for facemen.

23277. (*Mr. Enoch Edwards.*) Do those figures include your percentages?—Yes.

23278. (*Mr. Smillie.*) We may take it that there are some excellent men employed as firemen in Fife?—Yes.

23279. It would be an additional security for a good man if there was an examination for competency and certificates granted?—Yes.

23280. It would not be a hardship on the employers other than it might force them to pay a higher wage than at present?—Undoubtedly it would make for efficiency.

23281. Even in the interests of the employers themselves, an efficient man might be of greater service than a non-efficient man?—Yes.

23282. Do you consider that the fireman is the most important official about the colliery so far as the safety of the mine is concerned?—Yes.

23283. Is there any complaint from the employers or the mines inspectors so far as your county is concerned as to want of discipline amongst the workmen? Are they a wild class of people?—No.

23284. You have no foreigners down there?—We have a few.

23285. Not very many?—Very few.

23286. How is it possible that you can have discipline in your pits if you have a large number of foreign workmen who are not amenable to discipline? Is the Fife miner amenable to discipline?—Yes, but I cannot see how the foreign workmen can be amenable to discipline when they have not a knowledge of the English language.

23287. You have not many, and you do not know?—Any we have know a sufficient amount of English to make themselves understood.

23288. They have probably drifted from Lanarkshire into your direction?—Possibly.

23289. Have you many prosecutions for breaches of the Special Rules or Coal Mines Regulation Act?—We have had a few within recent times: more than used to obtain within the last two or three years.

23290. As your mines develop and become more dangerous it will be more necessary to them because there are more rules to observe?—Yes.

23291. You do not object to prosecutions where miners have been guilty of a serious breach of the Coal Mines Regulation Act?—No.

23292. Your union does not defend persons charged with a breach of the Coal Mines Regulation Act?—No, unless we have good reason for believing that the parties charged have not been guilty of an alleged breach of rule.

23293. You never think of defending a person whom you thought was guilty?—No, the very opposite, we have advised them to go and plead guilty.

23294. Do you do your best as an official of a trade union to encourage the men to carry out the rules provided for their safety?—Yes.

23295. Do you think it would improve discipline to have a system of fines established so that workmen might be fined 1s., 5s., or £1 by arrangement with the manager rather than be prosecuted?—I am entirely against that—I mean against the employer having any such power. I do not think that would lead to efficiency or in any way create an enforcement of discipline.

23296. Do you think that prosecution where an offence has been committed is the most effective way of preventing such a thing taking place again?—Yes.

23297. What do you mean by a systematic method of timbering being rigidly enforced by competent men? Do you mean that the men at the face should be compelled to timber in a certain way, or that the employer should employ some person to do the timbering?—An effective system of timbering could be done in either of the two ways that you have suggested, but personally I think that the men at the working face should do the timbering, and that the working face should be in charge of an experienced miner.

23298. And be under the supervision of a competent person whose duty it was to see that it was done. Have you any particular systematic method of timbering which you would suggest, such as putting up props at a certain distance, 2 ft., 3 ft., or 4 ft. from each other. Is there any other method of timbering you can suggest which would prevent accidents from falls?—Where the men are digging the coal?

23299. Yes, either longwall or stoop and room.—Where the men are cutting the coal with a pick I would suggest that the system that should be adopted there would be in accordance with that provided for in the additional Special Rules. Where the coal is being cut by machinery, I mean by a coal cutter, I would suggest that a special method should be adopted there, that method being straps with a hole needled in the coal and one end put there and a prop on the other end. When the machine had cut the line of face there could be a second prop put on the in-end of the strap. This is what I would look upon as an effective system of timbering where the coal is cut by machinery.

23300. There has been a large development in coal-cutting machinery in Scottish mines?—Yes.

23301. Does that apply to Fife too?—Yes.

23302. Is it likely to be much greater in the future?—It is likely to be greater in the future.

23303. So that our accidents from falls at the coal face will in the future be largely accidents at machine wall faces?—Yes.

23304. Have you experience of machine-cutting yourself?—No, I have no personal experience.

23305. Have you been at the coal face when the machine was cutting?—I have been there and examined the machine, and the face, and the operations.

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Mr. William Adamson.

13 June 1907

23306. Are you aware that they cannot hear the roof working. Supposing it is dangerous you cannot hear any sounds of roof working where the machine is cutting?—That is why I propose this special method of timbering.

23307. You think, in order to prevent accidents at the face, that method would require to be adopted?—It is absolutely necessary if safety is to be preserved.

23308. At the face where men are cutting and getting coal do you think the present system of having a prop according to the rule——?—At such distances as the management thinks fit, and is provided for in the additional special rules.

23309. That might be done by the men themselves?—Yes, in fact I favour the men themselves doing it.

23310. They are supposed to do it, but they do not always do it at the present time?—They are supposed to do it at the present time.

23311. As a matter of fact do you know that it is not always done?—Yes.

23312. Many accidents arise from it not being done?—Some accidents, at least.

23313. I think you fear that the number of accidents will increase at the machine walls in future as the development goes on?—Yes.

23314. This method which you propose seems to be effective and should be compulsory?—Yes.

23315. A strap should be put across?—Yes.

23316. Over 4 ft. or 3 ft.?—I should leave a power in the hands of the management to fix the distances that they considered necessary. Just as in the other case where the coal is being got by the men with a pick.

23317. One end of the strap would be over the coal, and the other end would be supported by a prop before the machine came along?—One end of it would be needled into the coal and the other end supported by a prop.

23318. And when the machine passed you would put another prop to the inside end, because the coal would be coming down?—Yes.

23319. That would be your method of protecting the workmen at machine walls?—Yes.

23320. (*Mr. Enoch Edwards.*) By machine cutting do you mean holing under?—Yes.

23321. You are not cutting the face but holing?—Yes.

23322. (*Mr. Smillie.*) Some of the machines undercut to the extent of 3 ft. in?—Some, generally 4 ft.

23323. The cuts are 3 to 6 ft.?—Yes, in addition to that I would suggest that the inspection districts under the charge of firemen should be made very much smaller than they are at present, so that the firemen could have a closer supervision of the men and compel the propping to be done in a more efficient way than it is done at present.

23324. Do you think that the fireman should devote a large part of his time to ensure that this system of systematic timbering is being carried out?—Yes, I think that the whole of his eight hours, if eight hours is to be his shift, ought to be taken up in making inspections; he ought to be going round the whole of his time. I do not think that it should be possible for a manager to take away firemen to do other duties that can be done by the ordinary shift men. Inspection, in my opinion, means inspection all the time a man is on duty.

23325. His whole time should be devoted to looking after safety—ventilation, timbering, and general inspection of places?—Yes.

23326. Is his time taken up by anything else just now?—Yes.

23327. What do they have to do in addition?—They have to do all classes of oncost work, that is, day's wage work.

23328. Redding falls, laying roads, looking after getting out the trams and tubs, and pony driving?—Yes.

23329. Is the larger half of their shift taken up with looking after this?—Quite one-half.

23330. That generally applies in Fife?—Yes, in a large number of collieries.

23331. You say that you think their districts should be made much less than they are, and that their whole time should be devoted to looking after the workmen rather than to the general management of the colliery?—Yes.

23332. Would you be favourable to any precautions being enforced by Act of Parliament, which it was admitted might lead to safety so far as haulage accidents are concerned?—Yes.

23333. You think that anything which is admitted to be a precaution against accidents, or a preventive of accidents, should be included in the law?—Yes.

23334. So far as haulage inclined planes and all other kinds of mechanical haulage are concerned?—Yes.

23335. Are you troubled in Fife with underground fires more than in any other place?—More than in any other part of Scotland, so far as I know.

23336. I will leave that to Dr. Haldane to deal with. You say that safety lamps ought to be introduced into all mines where the Government inspector thinks that there is danger of an explosion. That would mean where the Government inspector is of opinion that safety lamps should be introduced because of danger from firedamp, that he should have the power to enforce their going in?—Yes.

23337. He has not that power at the present time?—No.

23338. Do you think it would be safe and wise to leave that in his hands?—Yes.

23339. You are satisfied that the Fatal Accident Inquiry (Scotland) Act has conferred sufficient power on us, so far as inquiries are concerned. It is reasonably satisfactory?—Yes, so far as our experience goes. I may say our experience is short as yet, but at present it is fairly satisfactory.

23340. We have considerable power under that Act, and generally that inquiry is satisfactory to us?—Yes.

23341. There might be a serious explosion or accident which would justify us in asking for a second inquiry?—I think that we should have that power in special cases such as you mention.

23342. That is one thing which is claimed by our Bill?—Yes, that is so.

23343. (*Mr. Ratcliffe Ellis.*) I understand that you ceased to work in the mine four years ago?—Yes.

23344. The working in Fife is likely to be extensive in future?—Yes.

23345. And likely to be carried on under conditions of greater danger?—Yes.

23346. You think that more care would be required on the part of the manager and the officials, and, I suppose, you also think that more care would be required on the part of the men?—Yes.

23347. Are you doing anything in the way of instructing the men as to this, that they should take more care under the new conditions?—Do you mean personally, or the association that I represent?

23348. I mean personally.—Yes, I take advantage of any opportunity that comes in my way to impress that upon the men.

23349. What opportunities are there you take advantage of?—Mainly in conversation with the men.

23350. Do you attend many meetings and give many addresses?—I attend a few meetings.

23351. At these public meetings do you impress that upon the men?—I have not done much as yet at the public meetings.

23352. But you intend to do so?—I think that may be part of the duty of the leaders of the men in the future.

23353. You think that they should do that—take opportunities when they give addresses to the men, of impressing upon them the necessity of precaution and care in their work. Government inspection, you think, should be once in every six months at each mine?—Yes.

23354. Will you tell me what you mean exactly by an inspection?—I mean that every part of the mine where men are working ought to be inspected when the Government inspector comes along.

23355. Supposing the Government inspector knows the pit, do you think he could form a sufficient opinion to satisfy your views as to the entire condition of the pit by sampling a specimen, inspecting a part, and seeing the conditions under which it was worked. Do you think that he would be justified in assuming safety was provided for throughout the whole pit?—I do not think that would satisfy me. I think that the whole of the mines ought to be systematically inspected.

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23356. Do you think that two inspectors in Fife where there are over 20,000 miners could make a sufficient inspection to satisfy you?—The inspection would be very much superior to what it is now.

23357. To satisfy you that would mean one to each 10,000 men?—Yes.

23358. You consider that would be sufficient inspection in order to secure safety?—I think it would go a long way to secure safety anyway. Of course experience would teach whether they were able to cover the ground in an effective way, if my suggestion was given effect to.

23359. Supposing they could cover the ground, and each colliery was inspected as much as you consider necessary, once in six months, as far as inspection is concerned that would satisfy you in the direction of securing safety?—Experience would show whether it would be entirely satisfactory or not.

23360. Your present opinion is that is all that you would require, so far as inspection is concerned?—Yes.

23361. You do not seem to think that these firemen who are engaged are competent for their work. Do you think that the possession of a certificate would improve their competency?—I think so.

23362. What certificate is in your mind which they should possess?—I think that the certificate would be under rules made by the Secretary of State.

23363. It would be a Home Office examination?—Yes.

23364. Would a second-class certificate, now, meet your views?—I think it would; but I think the examination ought to include ambulance training also for the firemen.

23365. I daresay you are aware in some cases, although they do not make it a necessary qualification for a certificate, they say it is desirable that a certificate should be obtained?—I am aware of that, but I think it ought to be one of the necessary qualifications and parts of the examination.

23366. For a second-class certificate? Do you approve of the suggestion which has been made that when once the fireman is appointed the management should not be entitled to discharge him?—I think that at least the attention of the Government inspector should be drawn before the fireman is discharged.

23367. There is no other official about a colliery who is in that position now?—I look upon the fireman as being the most important official.

23368. There is no other official in that position?—No.

23369. Would you make the fireman the only man who should not be removed at the will of the management?—Yes, as far as I see.

23370. What is the manager to do before he can remove him?—I would suggest that he should report the matter to the Government inspector, and if, in the opinion of the Government inspector, there was not sufficient reason for dismissal, that the Government inspector should have the power to ask the manager to retain the services of the fireman.

23371. In point of fact, that he should not be entitled to dismiss him without the sanction of the Government inspector?—That is so.

23372. If the inspector said, "I do not approve of your dismissing this man," and the result of his being retained is an accident, would you relieve the manager of the responsibility of that accident?—If that method was in operation the fireman would be more under the charge of the Government inspector for the district.

23373. I should like you to answer the other question?—I would not be entirely prepared to relieve the manager of his responsibility.

23374. Do you think it would be right that the control of the officials should be taken from the manager and placed upon the Government inspector, and still that the manager should be held responsible?—I do not mean that the entire control should be taken from the manager.

23375. You mean the entire control as to whether he should discharge him or not?—What I said, of course, was, that the matter ought to be reported to the Government inspector, and that the Government inspector should be made aware of all the circumstances, and he and the manager could talk that over.

23376. I think your scheme must go further than that to be of any use. I understood you to say unless the Government inspector approved of it he should not be entitled to dismiss him. Supposing the Government inspector says, "I do not approve of your discharging that man," and his retention is the cause of an accident, is the manager still to remain responsible for that accident, or the Government inspector, or who is to be responsible?—I would not be prepared to say that the manager should be entirely relieved of his responsibility.

23377. Do you think it fair upon the manager that he should be put into that position?—Of course I am giving you a suggestion which, in my opinion, would lead to greater safety than at present prevails.

23378. I want you to tell me, do you think it is fair that a manager should be placed in that position?—I think it is fair if it leads to greater safety.

23379. Do you think any manager who is worth his salt would accept a position of that sort?—I may say frankly that I have talked that matter over with some managers in my county, one of whom was quite favourable to the fireman being put more under the control of the inspector than they are at present.

23380. Have you found any manager who would accept the position I have suggested to you who would like to be put under such a scheme, to be held responsible and still have no control over the fireman?—He would still have a certain amount of control.

23381. He has practically none. He cannot discharge him without the sanction of the Government inspector; have you found a manager who would consent to remain responsible and give the Government inspector control over his fireman?—Of course, that is a question which I have not asked them.

23382. It wants a little more consideration, does it not? With regard to inspection under Rule 38, as far as safety can be got by inspection, I know what satisfies you. You want General Rule 38 extended so that persons who are permitted now to inspect should do so as a matter of right?—Yes.

23383. Am I right in supposing that this inspection under Rule 38 is intended to satisfy the men of the safety of the mine?—Yes.

23384. The gentleman who gave evidence before you, Mr. Brown, said he was the sort of man that ought to be eligible to make an inspection. That gentleman had not worked in a pit for 21 years—perhaps it was not Mr. Brown: it was Mr. Wilson, I think. Do you think an examination by such a man would be more likely to satisfy the men of the safety of the pit than an examination by two of their own number working in the pit—two of their mates? Put out of your mind for the moment the fear of reprisals. Taking it merely as a question of satisfying the men, do you think they would be more satisfied with an examination of two of their colleagues who were undertaking the danger—if there was danger—than by a gentleman whose experience underground is 21 years old?—If the alteration in the law was such as I have suggested, what would be the more likely to happen would be that the powerful associations at least might see their way to take two men from the working face now and appoint those men to make inspections on behalf of the workmen.

23385. That is not an answer to my question. We will consider after as to the men being afraid, but put that aside for the moment. With the object of satisfying the men that the place is safe would not they be more likely to be satisfied with a report from two men who were to be subject to the danger (if any) themselves, than that of a man entirely out of danger and whose experience below was 21 years old?—Very much would depend upon if that person was keeping himself in close touch with the underground workings. I may say, speaking for myself, I have been four years out of the pit, engaged at other work apart from being a miner, but I frequently, in the discharge of my duties, go underground—in fact I was there yesterday.

23386. If you say you do not know, I will not pursue it any further. This is the state of things. The men in the pit are afraid the place is not safe. Two of their number, who would be subject to the same danger if they make a mistake, make an examination, and they report whether this place is safe or not. Do you think that the men would be more satisfied with a report of that sort than they would be likely to be with that of a man sent to have a look round whose experience underground

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Mr. William Adamson.

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is 21 years old?—I think the men would have more confidence in an inspection made by one of the union officials or checkweigher.

23387. Will you please forget the union. I am talking about inspection to satisfy the men of the safety of the mine. The man says, "I am subject to the same danger; if I am satisfied you will be satisfied." Would not that satisfy the men? They probably would be union men who made the inspection. Is that not more likely to satisfy the men than to send a man down whose experience is 21 years old?

(*Mr. Enoch Edwards.*) He is rather suggesting that they want the right of appointment, and that it should not be limited.

23388. (*Mr. Ratcliffe Ellis.*) I want to see if the object of this is to satisfy the men. I want to know, first of all, whether a report by men undergoing the same danger on the face of it is not more likely to satisfy the men than bringing a man in who has not worked underground for 20 years, and who is not subject to such risk?—I believe the men would have more confidence in the party who could give an independent report.

23389. (*Chairman.*) You think that they ought to have the fullest power of choice, and that the men ought to determine whom they desire to send down. If Mr. Ellis's view is correct they would send down men working at the pits, but other people take a different view, and in other mines men might prefer your view and say they prefer a man who was not working at the pit, but who had, and who had had experience in many mines, and whom they thought would be better than any man they could send down for the moment in the pit?—And he would be clear of the fear of any future consequences that might happen from the employer.

23390. (*Mr. Ratcliffe Ellis.*) With reference to the question of fear, have you any reasonable ground for supposing that if there was a report made to a manager that there was something in the pit unsafe, the men would be discharged or put at some disadvantage?—I have no reason to say that they would be, but I say that there is a fear in the minds of the men that such a thing would occur.

23391. They think there might be?—Yes.

23392. Do you think that is a reason why this power has not been exercised?—I believe that is the chief reason.

23393. At times there are disputes between the workmen and the employer as to the conditions of their work underground?—Yes.

23394. At the present time if they want the agent to go down he has to get the permission of the management?—Yes.

23395. If you had this alteration that would not be necessary?—No.

23396. He could go down whenever he thought fit?—Yes.

23397. And make any enquiries he thought fit. There would be no limit upon that right?—He would make an inspection.

23398. Do you propose that there should be any precautions taken that he should not use this right for any purpose except for the purpose of making these inspections?—I would be quite prepared to say that if it was used for any other purpose it would be an offence under the Act.

23399. A Government inspector has specific instructions given to him as to what he is to do and what he is not to do by the Government?—Yes.

23400. There would be no such control over one of these inspectors?—No.

23401. Would you be in favour of having provisions made similarly controlling him as to the use of the power he is to be given?—Yes.

23402. You think them reasonable?—Yes.

23403. Now with regard to safety lamps, you say that the Government inspector should put them in whenever he thought fit?—Yes.

23404. Do you find any difficulty with the men in getting safety lamps in?—No. We have had a very short experience of safety lamps in my part of the country, but I find no difficulty, as far as the men are concerned, in getting them in if they are recommended.

23405-9. Is there an additional payment made when the safety lamp is introduced? Do the men require additional payment?—Yes. I find the men are paid a little extra.

23410. Is there a charge made for the lamps?—Yes.

23411. How much is that?—1d. per day in one colliery I know of—for one class of lamp.

23412. That includes oil, trimming, and keeping the lamp in order, and the cost of the lamp?—Yes.

23413. So far as your experience goes there is no objection by the men to the introduction of the lamps?—No, if it is considered necessary.

23414. Is that if the inspector considers it necessary?—Yes.

23415. Now, with regard to the special inquiry, you say that your Fatal Accident Enquiry Act in Scotland gives you pretty much what you want, but that there might be cases in which you should be able to have a special inquiry afterwards?—Yes.

23416. Who would be the persons to apply for that?—The persons interested.

23417. Who are they?—The relatives of the deceased.

23418. If they were dissatisfied with the decision they should be entitled to apply. Supposing a manager is censured or committed for manslaughter, would he be entitled to have an inquiry, too? Is he a person interested?—Yes, I think so. I think it would be only fair.

23419. (*Mr. Enoch Edwards.*) In your first paragraph you suggest that in making additional appointments practical experience ought to be one of the chief qualifications?—Yes.

23420. What sort of practical experience do you mean?—I mean practical experience of all classes of underground work—men who have been actually engaged in most classes of underground work, particularly face work.

23421. Do you mean to say must have been a collier working at the face?—I should say he would make a far better inspector if he had had that experience.

23422. Is it possible for many men who are practical colliers, men who work at the face, to have the necessary technical qualifications for this position?—I know a considerable number of men who at present hold first-class certificates and who have had experience at the face.

23423. They have now?—Yes, they have worked at the face; some are working now as ordinary workmen.

23424. Do you consider this to be a qualification? If the occupation of a man previously was assistant surveyor, assistant colliery manager, or chief surveyor to a colliery, do you think those would be sufficient qualifications for chief inspectors?—I do not. I do not consider it is desirable to have that class of man appointed.

23425. (*Dr. Haldane.*) Do you mean to say you do not think the experience of being an assistant colliery manager is sufficient?—No.

(*Dr. Haldane.*) In practical experience you mean?

23426. (*Mr. Enoch Edwards.*) You do not think that would be sufficient?—No.

23427. (*Dr. Haldane.*) Surely a man who has been an assistant colliery manager, and who has had very considerable experience of every sort of underground work, is, as a rule, sufficiently qualified?—I know a considerable number who have not had sufficient experience to undertake—at least, in my opinion—the duties of an inspector.

23428. It is a matter of what that means. It is a matter of what experience he has had as assistant manager, is it not? Many managers I know have gone through every kind of work that is done in the colliery by the colliers?—I know a considerable number who have not gone through every grade of work.

23429. It might or might not be a sufficient qualification. Is not that what you would rather say?—No, I would make practical experience one of the chief qualifications in making this appointment.

23430. This may imply very considerable practical experience. You could not say, from this statement on paper, which Mr. Edwards has quoted, whether these qualifications are in your opinion sufficient or not. You would want to know what the man had done in this case in the way of practical experience?—If I understand

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Mr. Edwards' question aright, he said a man who had been an assistant surveyor or assistant colliery manager——

23431. (*Mr. Enoch Edwards.*) And then chief surveyor?—Yes. I do not consider that these qualifications are sufficient.

23432. (*Mr. Smillie.*) An assistant colliery manager might have had a very great deal of experience, but you would require to know what his experience as a colliery manager was?—Yes. He may have actually worked at the face.

23433. (*Dr. Haldane.*) Presumably he had, I should say, if he has had a proper training?—There are a number I know who have not. I do not consider that class of man would make good Government inspectors.

23434. (*Chairman.*) The mere fact that he has been an assistant colliery manager is not sufficient qualification. You must go behind and ascertain what he has done as an assistant colliery manager?—Yes.

23435. (*Mr. Enoch Edwards.*) I gather, after thinking this matter over, what the witness means is this: in your experience among men and the ways of dealing with things, you think a Government inspector, although he has had a thorough technical training, it is all the more desirable that he should have a practical training?—Yes.

23436. And you think if he has not had a practical training he should not be appointed?—Yes.

23437. (*Dr. Haldane.*) You would include in the practical training working at the face and real practical experience?—Yes.

23438. (*Mr. Enoch Edwards.*) Will you broaden that a little. If he has not worked at the face, but worked in a pit from boyhood and been of studious habits, having done all sorts of work in a pit, had, say 15 years of it, seen pit life and understood it, can set timber and understands the question—would you think that would be a qualification?—Well, I should rather it was a man who had a practical experience of all classes of mine work, including face work.

23439. He must have actually cut coal?—Amongst other classes of mine work I think he should have training in cutting the coal.

23440. Are there many men who cut coal who qualify themselves for first-class certificates?—Yes, there are a considerable number.

23441. I do not know what subjects are necessary to qualify for the position of manager in Scotland, but I know the nature of the subjects in England, as one of the managing board, and it seems to me that he would require to be a man of very studious habits and a considerable amount of intelligence, and to have an opportunity for training as well as cutting coal before he could pass an examination in England.—I know a considerable number of men who have had to make their opportunities, who have not had many opportunities lying at hand, but who have studied and obtained first-class certificates, and in my opinion they would make very good Government inspectors.

23442. That would apply to some of us here, who never went to school after nine years of age. That is the position. You think he would be better qualified if, in addition to his technical knowledge, he had practical experience at the working face?—Yes.

23443. (*Dr Haldane.*) You would go further and say it is essential that he should have practical experience?—Yes, if he is to make a good Government inspector.

23444. (*Mr. Ratcliffe Ellis.*) You would not appoint any inspector out of that class?—I mean to say if a man is an applicant for an inspectorship and there were men who had these qualifications I mention, if I had to make the appointment the appointment would go every time to that class of man.

23445. Do you say the law should be that no inspector should be appointed except from that class?—I think I would even be prepared to go that length.

23446. (*Dr. Haldane.*) From men who had gone through practical work at the face?—Among other classes of mine work.

23447. (*Mr. Enoch Edwards.*) Mr. Adamson suggests whatever practical experience a man may have, he must be otherwise technically qualified, but he must have this experience too?—Yes.

23448. You say that preference should be given, all things being equal, to the man who has worked at the face?—Decidedly.

23449. (*Mr. Ratcliffe Ellis.*) Would you apply that also to a manager's certificate?—I think I would be prepared to apply that to the qualifications necessary for a manager's certificate being granted.

23450. That it should not be granted to a man who has not those qualifications?—No.

23451. You would go as far as that?—I mean it should not be granted.

(*Mr. Enoch Edwards.*) If the number of people applying for certificates are equally trained and educated, you think that the preference in all cases should be given to the applicant who has had a practical training, and that until an applicant who has had no practical training can show he has had it, he should not be given the certificate.

23452. (*Mr. Ratcliffe Ellis.*) You will not give a certificate to any manager except to that class who can show that they had the experience which you consider necessary to qualify an inspector?—Yes.

(*Dr. Haldane.*) Is there anyone here who is on an English examining board?

(*Mr. Enoch Edwards.*) Yes.

(*Dr. Haldane.*) Do you not insist on looking into a man's practical experience, to see whether he has actually worked underground?

23453. (*Mr. Enoch Edwards.*) Many men get first-class certificates in England who have very little practical knowledge of working at the coal face, but not in the sense Mr. Adamson has put it. They have worked in the pit in some form. If he is a surveyor he is in and out of a pit?—You mean he has knocked about the pit.

23454. (*Mr. Enoch Edwards.*) Yes. With reference to the question of inspection under Rule 38, Mr. Ellis put a series of questions upon this. What you mean is, that either persons who have been employed in the mine should be appointed or others. You mean that the workmen should have the right to appoint whom they thought fit, whether in that mine or in another mine, or out of the mine?—Yes. 38

23455. That is what you mean?—Yes.

23456. You would have regard to the experience they had in the mine?—Providing he has been a practical working miner.

23457. And the choice should not be limited to that pit or the men working in other pits?—Yes.

23458. (*Mr. F. L. Davis.*) On the question of firemen, how do you explain the fact that the owners appoint so many incompetent firemen? What is the reason for that?—One of the chief reasons I have already given. I do not think the pay in this part of the country is a sufficient wage to get the best class of workmen. I look at this question personally from my own practical experience as a working miner. I could have been a fireman on more occasions than one. My chief reason for refusing was that I could earn about 2s. a day on an average as a miner more than the employer was prepared to pay me as a fireman.

23459. You will admit that the manager who asked you to be a fireman was a man of great judgment, he wanted to get a good man in you?—That may be so.

23460. Your point is that the men are not well enough paid?—That is one of the chief reasons; I have other reasons, of course.

23461. Is not that very short-sighted on the part of the manager, because, after all, he is responsible. If anything goes wrong he is responsible for the wrong-doing of his officials in any serious accident?—I should say it is a short-sighted policy.

23462. I cannot understand the managers, who have all the responsibility, constantly appointing incompetent men. That is the thing that puzzles me. You think they do?—Not always. I know some very good men who are firemen.

23463. You do not put it forward as a general thing?—No.

23464. Did I understand you aright to say that you are in favour of more inspectors being appointed?—Yes.

23465. Was I right in understanding you to say that however many more inspectors were appointed they should be all of the same class? You would not have two or three different grades of inspectors?—Whatever additional appointments are to be made, I think it would make for greater efficiency if practical experience was regarded as one of the chief qualifications.

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23466. I was not sure whether I caught what you said. However many more inspectors are appointed, you think that they should all pass the same examination ?—Yes.

23467. Will you tell me why the timbering of his place is not always done by the coal getter ? I think you stated that it should be done by him and is generally done, but there are cases when he does not do it when he ought to do it. Will you tell me why ?—So far as our district is concerned there are very few cases in which it is not done by the coal getter. There are a few of the collieries, where machines have been introduced, where they have a special set of men for doing the timbering, apart from the men in charge of each of the faces, but I am not favourable to that method of timbering.

23468. You told us frankly that you thought the collier was the best man to do the timbering ?—Yes, with experienced men in charge of the working face, in conjunction with a limitation being put on the area under the supervision of the fireman. so that he could give closer supervision to the operation.

23469. And that he should have more time to look round and see that the colliers have the timbering necessary for their safety ?—Yes.

23470. You said sometimes they do not do as much as they might do for their safety. What is the reason that they do not do it ?—One of the chief reasons is, that they are paid by results instead of by so much per shift, and in their anxiety to earn wages sometimes they forget the more important duty of attending to their safety.

23471. Do you suggest that the fireman, having more time at his disposal, could keep them up to the mark, so to speak. by looking round the faces more often and seeing that they do what they ought to do ?—It would remedy matters.

23472. It is the anxiety of the collier to get as much coal as he can—he is paid by results—that sometimes makes him take risks that he otherwise would not do ?—Yes, that is so.

23473. (*Dr. Haldane.*) In your district the coal is subject to spontaneous fires to a considerable extent ?—Yes.

23474. Do those often lead to fatal accidents ?—We had one accident whereby six lives were lost in 1891, and we had one accident last year whereby two lives were lost.

23475. Is there much destruction to coal through these fires ? Have districts to be shut off ?—Considerable areas in some parts of the county have to be shut off in consequence of underground fires.

23476. Are these districts often permanently lost—I mean these areas of coal ?—Parts of them are.

23477. Have you ever had any experience of working at one of these underground fires yourself ?—No.

23478. You are of opinion that life-saving apparatus should be provided with a special view to these fires ?—Yes.

23479. Is that a general opinion among the men ? Have you any reason to know about that in Fifeshire ?—A considerable number of the men consider that.

23480. Are there no appliances of that sort used in that district ? Are there no smoke helmets or anything of that sort ?—Not up to the present time.

23481. Never; in dealing with fires or building up a gob fire are they used, so far as you are aware ?—No, not to my knowledge.

23482. You are of opinion that they would be useful ? Is that in the way of saving life or of saving property ?—Both.

23483. The gob fires are fairly frequent, and there would be fairly frequent occasions to use these apparatuses from fire alone, apart from explosions ?—Yes.

23484. With regard to lamps, I see that you suggest that three of the best kinds ought to be scheduled, and that the manager should be left a discretion as to which of the three will be best for use in the mine under his charge. I suppose you do not mean to say that only three should be scheduled ? You suggest that the Home Office should pass types of lamps just as they pass types of explosives ?—Yes.

23485. There should not necessarily be only three for the management to choose from. Why do you limit the number to three ? Do you mean, at least three ?—I think I would limit the number to three of the best kinds.

23486. It is very invidious to say which is the best kind. If they all pass a certain test by the Home Office Inspectors, or whoever has to deal with it, it is very difficult to say which is the best. The makers send up lamps which pass the Government test. Why should you limit the numbers available at any colliery ?—It is with a view to avoiding accidents as much as possible by possibly having an inferior class of lamp in use.

23487. So far as accidents are concerned it is surely possible to make all lamps thoroughly safe, and to allow no lamps to pass that are not thoroughly safe so far as it is possible for human ingenuity to make them safe ?—It would meet may view if they were tested by the Government officials and scheduled.

23488. You would not necessarily limit the number available. Some lamps might give better light. There might be advantages in one lamp over another in certain seams. You do not mean that necessarily you would limit them to three or to a small number ? You would allow the manager to pick any of the types which had passed the Government test ?—Yes, I think I would be prepared to do that. What I really meant was that they should be tested and scheduled by the Government.

23489. That is a recommendation we have had from several sides. With regard to ankylostomiasis, are there any mines to your knowledge that are both deep and wet in Fifeshire ? Are you aware that it requires damp as well as heat to propagate this disease ?—Yes, there are some parts of the mines in Fifeshire where they are over 300 fathoms, and where there is a considerable amount of water.

23490. These mines would be places where the disease might propagate if it was introduced ?—And where the temperature is in some cases 70 degrees.

23491. Have you observed that there is mess about in Fifeshire—human excrement ? Are the mines fairly clean ?—In the main they are, although I think that, in view of the fact that the temperature in some parts is fully 70 degrees, a recommendation should be issued from somebody in authority drawing attention to the danger, with a view to steps being taken to have sanitation as fairly reasonable as possible, prevention being, in my opinion, better than cure.

23492. Do the men make use of the goaf for sanitary purposes ?—That is the general practice.

23493. If that is so, I suppose there is not much mess by that method. I suppose it is buried in the coal and dust very soon ?—Yes, although occasionally it is done in other parts.

23494. Are there many ends, and places of that sort, which get dirty to your knowledge ?—There are some I have seen.

23495. I suppose these are the worst places in the mine ?—Yes.

23496. Do you think it would be a good thing if sanitary conveniences that were regularly emptied were emptied at places of that sort ?—Or, rather, if it were recommended that where men have to answer the call of nature they should do it in such a safe place as the goaf, where it could be buried.

23497. Do you think it possible to arrange that in most of the Fife mines, because I think it is excellent if it could be carried out ?—I think it could be fairly well carried out if the men were convinced there was a real danger.

23498. (*Chairman.*) Fines can only be inflicted by agreement between the men and the mining officials ?—Yes.

23499. Supposing an official said to a man, "We want to fine you for a breach of discipline," and the man said, "I will not submit to a fine; if you want to prosecute me you can; I do not believe I am guilty; I want to have my case tried in a court of law;" do you think any notice would be taken of that attitude. Would it entail dismissal or reprimand or any unpleasant consequence ?—It might. That danger ought to be avoided by taking away the power from the manager to inflict fines.

23500. They have no power unless the men agree, but it has been suggested if the men do not agree they have the whip hand, because they can dismiss them ?—Yes, that is so.

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23501. Do you think that is so, or do the men always agree to fines?—There is that danger, and the men, recognising there is that danger, are apt to agree to a fine.

23502-3. Even though a man may consider that he is wrongfully accused and fined, still he thinks it worth while to pay a fine rather than insist upon being brought into court?—Yes, there is that danger.

23504. Do you favour coal-cutting machines, or not? Do you think as regards the safety of the mine the machines are an advantage or not?—I think that there is more danger attached to getting coal by machinery than by the old method.

23505. Have you any statistics which would show whether or not it is more dangerous in practice?—No, I am simply giving you my own opinion.

23506. Do you think that there is more danger from falls of roof and sides?—There is more danger, particularly from falls of roof.

23507. There has been evidence to show that unless you are very careful there is much more coal dust and much finer coal dust by the machine than by the ordinary way, and that might be objectionable from the point of view of safety?—Yes.

23508. If coal-cutting machines are to supersede in future to a great extent the ordinary methods of hewing, great precautions will probably have to be taken?—Greater precautions than we have been accustomed to up to the present time.

23509. You say you did not take the position of a fireman because of that 2s. a day less. Were you certain as a hewer of constant employment?—I had to run my risk, of course, but I found that on the average I could earn more money.

23510-1. Not quite 2s. a day more, but something more?—Yes, about the sum I have said.

23512. Supposing they had offered you wages which would have given you rather more than you would have got as a hewer, would it have crossed your mind that it might be disadvantageous to you to become a fireman, because you might have been dismissed or get into disgrace if you reported unfavourably of the mine?—That is another one of the difficulties.

23513. Then it did cross your mind?—Yes.

23514. You yourself say that you would have felt that it was a possible state of things that you might have got into disfavour by giving a report which you considered true and which the manager might have thought was a biassed report?—Yes.

23515. Supposing these firemen's duties were confined, as you think they ought to be, to looking after the safety of the men, do you think in that case the managers would be likely to obtain better men as firemen than they do at present?—Yes.

23516. At present I understand you hold the theory, whether it is a just one or not, that the employer is influenced in appointing firemen by his ability to look after the management of the mine, I mean the trams, and so on: a manager when he now appoints a fireman has regard not only to his capability of attending to the safety of the men, but also his capacity as a kind of assistant manager?—Yes, I have already said I favour the firemen having to undergo an examination and a certain test, and if that view is to be given effect to in the future, the managers' choice will be limited to the men who have undergone that examination and passed it successfully.

23517. You consider that there would not be very much in the objection if men were obliged to pass this examination, and if the choice of the managers was restricted in the way you suggest, as regards the question of getting good men as firemen. You think that would be settled sufficiently, and that as regards the question of getting good men, it would not matter what the duties of the firemen were?—If that view was given effect to, it would lead to the wages of the men being increased.

23518. And you would get better men. As regards safety, do you think it is extremely desirable that the fireman's duties should be confined to looking after the safety of the men?—Yes, I think they should be entirely confined to looking after the safety of the men.

Mr. WILLIAM WEBB, called and examined.

Mr. William Webb.

23519. (*Mr. Smillie.*) Are you secretary and agent of the Stirlingshire Miners' Association?—Yes.

23520. Have you had considerable experience as an underground worker?—I have had about 20 years' experience underground.

23521. Has your experience as a miner been confined to coal mines?—Not solely.

23522. Did you work in mines in Cornwall?—Yes, for a short time, about 3 years as a lad.

23523. You had 17 years' continuous employment underground?—20 years in coal mines.

23524. You know all classes of mining work very well?—Yes.

23525. How long is it since you gave up being a miner?—13 years.

23526. Are you down the pit occasionally now?—Occasionally.

23527. Making examinations in connection with disputes?—Yes.

23528. With regard to the question of general inspection of mines by the Government inspectors, do you think the present inspection is sufficient or effective?—I think the present inspection is altogether inadequate to meet the requirements in any satisfactory manner.

23529. I suppose you will agree that the present inspectors are perfectly capable of making an inspection if they had sufficient time to do so?—Yes, I have not a word to say against them.

23530. But you are of opinion that it is a physical impossibility that they can undertake the inspection, which you, at least, would like to see undertaken?—That is it.

23531. They do visit the mines occasionally?—Occasionally they do.

23532. In the event of a fatal accident taking place, or an explosion, or if their attention is called to any threatened or apparent danger, they at once visit the mine?—They are on the scene at once, as soon as convenient.

23533. In the event of an accident they usually visit the place where the accident takes place only?—Only.

23534. In the event of their attention being called to a danger or want of ventilation, they visit the portion of the pit to which their attention is called?—That is my experience.

23535. Or if an inspector was informed by letter either anonymously, or by the agent of the miners, that the whole of the colliery was in a bad state, he would, in all probability, make a thorough inspection of the colliery?—We should expect it to be done.

23536. Have you known such a thing to be done?—Yes, I have known recently where a colliery was thoroughly inspected on the ground you state.

23537. Your chief complaint at the present time is really that the inspectors have not the time to devote to the matter?—That is it.

23538. That is provided you are right in thinking there should be a thorough examination of the mine?—Undoubtedly.

23539. I suppose your experience, as a miner and as a miners' agent, leads you to the conclusion that the mere sampling of a mine, by going to one particular part of it, is not the best method of finding out whether or not the Mines Act is being carried out thoroughly?—That is my opinion.

23540. Are you of opinion that inspection by Government inspectors has tended to greater safety underground?—I am inclined to think so on the whole.

23541. You think an inspection of that kind would still further increase the safety?—I do.

23542. You are of opinion that there should be an increase in the number of inspectors?—Yes.

23543. Do you think it would be a wise provision to draw them from the ranks of practical mining men who had practical experience as underground workers?—As I have said, I have not the least fault to find with the present inspectors—I believe they perform their duty according to the time they have at their disposal, but I certainly would be in favour of drawing them from what we call our practical working miners.

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Mr. William Webb.

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23544. Other things being equal do you think it would be an additional qualification if they had experience of underground working?—Yes.

23545. You think they should have all the scientific and technical knowledge possible?—Yes.

23546. But it would be an additional qualification if they had the experience of being practical working miners?—Yes.

23547. Do you think that the present method of appointing the firemen, that is, that the manager shall appoint a person, is altogether unsatisfactory?—I do.

23548. Is it your opinion, and the opinion of the miners in Scotland generally, so far as you know, that the best men are not at all times chosen for that position?—That is my information and that is my experience as well.

23549. Has it been your experience that a really competent person who was sufficiently strong-minded and capable of carrying out the Mines Act is not likely to be kept for any lengthened period?—I know a gentleman such as you mention, and he had a strong will of his own and desired to sign the book according to his judgment, and he was called in question for doing so and had to leave the colliery in consequence.

23550. Called in question by whom?—By the manager.

23551. (*Mr. Ratcliffe Ellis.*) Was he discharged?—He had to leave the colliery, and it was attributed to this, that he signed the book that there was danger.

23552. Was he discharged?—It was called in question, and immediately afterwards he had to leave the colliery, and he attributed it to his action in signing the book.

23553. Did he leave of his own accord?—I can scarcely say.

23554. (*Mr. Smillie.*) Was he discharged?—Well, there are two ways of discharging a man, you can give a man a place where he cannot earn a livelihood, and he must live you know.

23555. (*Mr. Ratcliffe Ellis.*) What was done in that case?—He said he had his place so much interfered with by the manager that he left.

23556. (*Mr. Smillie.*) Is it possible for a mines' manager to make the position of a fireman so unbearable that he is obliged to leave?—Yes, and firemen have also told me they have signed the book with the pen, which from their conscience they were opposed to, that all things were right, when in their very heart they knew it was not so, but on account of the position they were placed in they did it.

23557. You are now speaking of what fireman have told you?—Yes.

23558. In addition to that, you know it is common talk amongst firemen and miners generally that the position of firemen at many colleries is this: that they must do exactly what the manager tells them in regard to signing the book?—I think so in many instances.

23559. If the law provided that firemen must hold a certificate of competency, which has been secured by examination, do you think that that would improve the status of firemen?—I think it would improve it greatly, and I would be in favour of firemen being altogether independent of the workmen and altogether independent of the manager.

23560. Even supposing they have a certificate, if it is still in the power of the manager to dismiss them, you think they will not be as free as they otherwise should be?—That is my opinion; they will be still tied to a certain extent.

23561. Is it the opinion that the ordinary report-book which a fireman signs in Scotland, is all printed matter with the exception of the name of the fireman, or almost all printed matter?—We are given to understand it is so.

23562. Have you seen a report-book?—I have not.

23563. You cannot speak to that?—I cannot.

23564. Do you think a second-class certificate—that is a second-class mine manager's certificate—would be sufficient proof of qualification for a fireman?—I think it would be an improvement on what it is now.

23565. Are you prepared to give an opinion as to whether it would be sufficient?—I do not care to give an opinion upon that.

23566. What is a fireman supposed to do at a morning inspection?—He is supposed to go round to all the working places. In my opinion the area he has to cover is far too great for the time at his disposal. It is just a hurrying round.

23567. He is supposed to examine all the working places?—All the working places.

23568. Is he supposed by that examination to find out whether or not there is any danger from the roof being in a bad condition?—Yes.

23569. In the whole of the working places?—Yes, in the whole of the working places.

23570. He is also supposed to ascertain whether or not there are dangerous accumulations of gas, either explosive or any other kind?—Yes.

23571. Is it the faces only, or is it his duty to examine all the roadways leading to and from the faces where men have to travel?—That is his duty.

23572. Do you think that the districts, so far as you know them from your own personal experience, are of such a nature as to enable a fireman within two hours in the morning to complete his statutory duties?—I have to qualify my statement to a certain extent; we have collieries where I think the fireman is quite able in the time of two hours to cover it, but we have other collieries where it is almost impossible for him to do it properly in that time.

23573. There are actually pits in Scotland where the Mines Act is being carried out?—Yes.

23574. Some of the firemen have districts where they can make a thorough examination?—Yes, small districts.

23575. But there are districts in which a fireman may have 50 or 70 men under his jurisdiction?—So much so that he has to change his clothes when he comes back after his inspection, he has been that heated up and exhausted.

23576. And that inspection might have been an examination of the faces alone, without the roadways at all?—Quite so.

23577. You do not consider that is a safe method of doing business?—Far from satisfactory.

23578. In some of the roadways leading to and from the face, which the fireman does not necessarily have to travel, there may be an accumulation of gas which would be dangerous?—Yes. Oftentimes the fireman takes a short road to go to a certain place.

23579. You are not blaming him now, but you are stating his district is too large?—Too large.

23580. And the only method of getting rid of that is to resign his position?—Yes.

23581. Under the present circumstances there would not be much difficulty in getting someone else to take his place I suppose?—That is just it.

23582. Do you know whether the miners in Stirlingshire or Lanarkshire, where you have had more experience, have ever been consulted in the framing of Special Rules?—I do not know of their being consulted.

23583. You agree that the miners who go underground every day should have some little say in the framing of rules for their own safety?—Yes, they should have some knowledge of what they think is requisite in the framing of Special Rules, and, whether right or wrong, if they are framed after consultation with them or their representatives, it would have a tendency for them to be more certain of them.

23584. I suppose you are particularly anxious, as a miners' representative, that the miners should carry out all rules which have been framed for their safety?—Yes.

23585. Do you find that the office-bearers of the Miners' Federation in Scotland are equally anxious with yourself upon that matter?—Yes: and we have gone the length of refusing to support a man in a court of law who has been found guilty of breaking rules.

23586. You decline to defend persons who are charged with breaches of the Mines Act?—Yes.

23587. Of course you would be prepared to defend any man who was a member of your Union if you were convinced he was not guilty?—Yes.

23588. There are a far larger number of accidents underground from falls of roof and sides than from any other cause?—Yes.

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23589. Do you think there could be rules which, if carried out, would prevent a considerable number of accidents which at present take place?—I do think so.

23590. Do you think that the miners or their representatives, because of their experience, are quite as able as the mine-owner and the managers to draft Special Rules for the safety of the workmen?—I do.

23591. And you think they should be consulted in the drafting of the Special Rules?—I do.

23592. If that were done do you think both on the part of the men and their representatives there would be a greater tendency to observe the rules and see that they were carried out at the collieries?—I think there would be that tendency.

23593. There would be a more earnest effort made than there is at the present time to enforce the carrying out of rules in which the men have no voice?—Yes. I believe the men would stick to them more, knowing their own representatives had taken part in framing them.

23594. I suppose the miners sometimes carry resolutions at mass meetings and conferences, and special efforts are taken to see that those resolutions are carried out?—Yes.

23595. Do you think it would be possible to take the same course with respect to Special Rules which have been mutually adopted for the safety of life and limb?—Well, of course, that is a big question, but I think something could be done in that direction.

23596. A considerable number of accidents take place in travelling roads where there is haulage?—Yes.

23597. I suppose it constitutes a serious danger to have a haulage road at the same time as a travelling road?—Yes, that is one of our greatest dangers, I think.

23598. Have you worked in collieries were the ordinary travelling road by which the men travel to and from the face was also used as a mechanical haulage road?—Yes, I have, and escaped a very serious accident.

23599. Many accidents have arisen from that?—Yes.

23600. I daresay you have run very serious risks yourself on more than one occasion?—Yes, on more than one occasion, in stepping into the manhole.

23601. That might be because of the breaking of a rope or the breaking of a coupling?—Yes, a coupling disengaged.

23602. In a general way you would be favourable to incorporating in the Mines Regulation Act, or any Special Rules, all well-established improvements to prevent haulage accidents or accidents on haulage roads?—Yes.

23603. And where a haulage road is used, in addition to being used as a travelling road, that is where a travelling road is not provided specially, are you of opinion that there should be sufficient room between the rails and the side for the men to travel?—I am. Manholes to me are not sufficient to secure the safety of the men.

23604. You would not advocate the taking away of the manholes—they should be still continued?—Yes.

23605. Do you think they should be whitewashed once a month?—Yes, and then you would be able to see them better.

23606. There is sometimes a difficulty, if a man is being chased by a train of hutches which have broken away, in ascertaining where the manhole is?—Yes, and there is this: that oftentimes he runs into danger under the circumstances instead of going away from it.

23607. If there were manholes along all the haulage roads do you think that would tend to greater security?—Yes.

23608. Are you in favour of further alterations in the method of timbering, or as to who should do the timbering?—That is a question in respect of which there are two sides. Ordinarily you would say that the man who extracts the coal and knows the nature of the roof would be the best man to do the timbering, but so long as the present system is in force I think the best way would be to have competent men to timber.

23609. I suppose a number of accidents at the coal face arise from the system of piecework?—Yes, I can speak on that matter from my own experience. Just before I left the colliery I happened to be filling a hutch, and knew perfectly well that the roof was bad. It required to have a tree put to it, but I was so anxious to fill my hutch and get my next turn that I thought it might remain, but before I finished the stone came down and I was off for several weeks in consequence of it. I ran the risk because I was anxious that my turn should not go past. I thought if I could secure my turn I would do it.

23610. As to the theory that the man working at the coal face is the best judge of the nature of the roof, and where the tree should be put, that is merely because the man at the coal face has had considerable experience of the nature of the roof there?—Yes.

23611. And is watching it from hour to hour, or day to day?—Yes.

23612. But if there was a special person appointed for a section of 10, 15 or 20 places whose statutory duty or special duty would be to timber or to supervise the timbering, would he not also gain the same experience and perhaps more?—Undoubtedly he would.

23613. With the additional advantage that he would not require to care about the next turn, or about the wages?—Yes, that would not disturb him.

23614. His chief duty would be, whether he was the fireman or whatever official he was, to see that either the places were timbered by himself or that the miner timbered the places?—Yes.

23615. He would have power to prevent a person working away at the face if there was apparent danger?—Yes.

23616. Have you made up your mind as to which of those systems you would prefer?—Yes. I would prefer a competent man appointed for that purpose to do the timbering.

23617. In the event of his absence a man would still be required to put up a prop for his own safety?—Yes.

23618. Do you think if that were generally adopted, so far as the Scotch mines are concerned, it would prevent a considerable number of accidents which at present take place?—It is my honest opinion it would.

23619. And you give that from your own experience as a working miner?—Yes, my own experience.

23620. (*Mr. Ratcliffe Ellis.*) You say you know a case where the fireman at the instance of the manager, made a false and incorrect report in his book?—What I stated was that a fireman had told me that because he signed the book that a certain section was not safe, and a certain number of men had to go home, the manager called him in question for doing so, and of course, afterwards, knowing his position was such, and it was impossible for him perhaps to get a start again, he oftentimes signed the book by the pen which his very conscience was opposed to for the sake of keeping the position.

23621. That he made an incorrect report?—Yes.

23622. How long ago is that?—About 15 months ago.

23623. Is there any objection to giving the name of the colliery where it took place?—Well, if I should be compelled, of course, I would do so.

23624. You may have been misinformed?—True, I may have been misinformed.

23625. Will you communicate with the secretary the name of the colliery where this took place, and then inquiry may be made from the manager to hear his version of the matter?—I will do so if it is required.

23626. The man told you?—Yes, the man told me that because he himself signed that it was dangerous, the men could not work, and on account of that he had to leave the colliery shortly afterwards. Of course he attributed it to signing that it was dangerous.

23627. (*Chairman.*) Is that the same case? I thought you told us just now he was not dismissed, but he thought it prudent on his own behalf to leave?—Well, I told you there were two ways to dismiss a man.

23628. (*Mr. Ratcliffe Ellis.*) Is there any difficulty in having that man brought before the Commission?—I cannot say. If you desire it, and I come in contact with him, I will speak to him about it.

23629. (*Chairman.*) Will you communicate his name to the Secretary of the Commission?—I will.

23630. (*Mr. Ratcliffe Ellis.*) Is he not working at the colliery now?—No.

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23631. You do not know where he is?—No. I saw him not many months ago.

23632. (*Mr. Smillie.*) You will find out?—Yes.

23633-4. Is he a member of your union?—He was a member up to a few months ago—he may be on the list now.

23635. (*Mr. Ratcliffe Ellis.*) Then do you think if there are such cases as that which you mention, that having a certificate would protect a man?—I said I was in favour of their being independent of the employer, and independent of the manager.

23636. The mere fact of having a certificate would not do that?—No, it would not carry that out altogether.

23637. But a certificate might do this, it might make the fireman himself more careful, because if he was not a careful man and neglected his duty he might not only lose his situation but lose his certificate?—Of course there is that side of the question.

23638. That is a reason for having a certificate?—Yes.

23639. That it might make the consequence of misconduct more serious than if he had not a certificate?—A man having a certificate is supposed to have a little more knowledge than a man not having any.

23640. The consequences to a man with a certificate might be more serious than to a man without a certificate—you agree with that I suppose?—I do.

23641. As to the Special Rules, you think that the men would observe them better if they had a voice in making them?—That is what I say.

23642. Have they not had a voice in making them?—Not to the extent they should.

23643. Therefore do you think they do not observe them as well as they ought to?—I do not say that; but there is a strong feeling of discontent with the men on this matter. Although the rules might be the same, if they or their representatives were consulted it would somewhat allay that feeling. I think the miners are loyal in carrying them out as far as possible.

23644. As to the timbering done by the miner, which you have explained in your own personal experience you neglected to do in order to get more coal, the necessity for the additional firemen is to see that the men do what the rules require them to do?—I think we do that now.

23645. You say you were tempted to break a rule, which was not to put up timber where necessary in order to get a little more coal?—Then I might have evaded the fireman in the same way.

23646. If the collier will not look after his safety, how can you help it?—Those Special Rules where not in existence at the time I took that risk.

23647. That does not alter the point. If the men will not look after their own safety how can you protect them?—This is just an exceptional case I referred to. On account of the pressure brought upon the man in order to earn his livelihood he was somewhat neglectful of his duty. I say if competent men were appointed for the purpose of timbering that responsibility would be taken from the workmen.

23648. What you are suggesting is this, that because a man will not look after his own safety, you must put additional expense on the management to prosecute him or make him take means to look after his own safety. Would the better thing not be that the man should look after his own safety?—If he was put on time and not piecework it might.

23649. Then you think although at the present time it is necessary for his safety to see his place is timbered, he would risk his own safety in order to get more coal?—You must not imagine for a moment that I knew this stone was coming down.

23650. I suppose no one would do that, but what I understand you to say is this, the collier is tempted to risk his safety in order to get more coal?—Yes.

23651. Then you say, "Now you must put some additional expense on the management in order to see that this man does what he ought to do, that is, look after himself?"—I cannot see the drift of your argument.

23652. What is your view as to the voice which the men ought to have in making the Special Rules?—The men should be consulted in making those rules—there should be a kind of joint rules between the men and the managers; and, as I say, I think they would be carried out with better feeling by the men.

23653. Supposing the employer wishes to propose a Special Rule, we will say, imposing some additional obligation on the men, would you then consider that the men should have a right to say "No, that rule shall not be proposed?—So long as the rule is there, as I have told you before, we are in favour of carrying it out.

23654. I am taking the case of a proposed new rule which the employer wishes to propose. Do you desire that the men or their representatives should say "No, we will not have that rule proposed"?—I have always found where the rule is joint it is faithfully carried out.

23655. I want you to answer the question?—If an employer of labour was going to make a Special Rule which I knew I could not carry out, then undoubtedly I am in favour of breaking it.

23656. No. I am speaking of a new rule, which I want to propose—before I can send that to the Home Office I must have your consent to it?—Yes.

23657. Do you say "No" to that—that I cannot propose it?—Yes, you can propose it and put it before us for acceptance.

23658. Suppose you do not accept it?—Then we will ask you to amend it.

23659. If it is not accepted by you I cannot propose it? Is it your view that I should not be able to propose a new rule if you do not agree to it?—Well, that is the long and the short of it.

23660. That is, you would prevent me proposing a rule which I consider necessary for the discipline of my mine without your consent?—You know my argument. I contend the workmen as well as the managers should themselves mutually agree to the matters to carry them out.

23661. Suppose they do not agree? Suppose I propose a rule about increasing your obligation with regard to the timbering? Suppose I propose you should fetch it from the bottom of the pit instead of from the gate end, and you said "No, I will not agree," I could not propose it?—I have found this to be the case—a thing yesterday was perhaps impossible, to-day it became probable, and to-morrow it becomes an accomplished fact because we have negotiated together.

23662. What I want to ask you is this: Is not the owner to be allowed to propose a rule to the Home Office except with the sanction of the men?—Now you have come close. Of course, this is a free country, and I would allow any employer to propose what he feels disposed to, but in the carrying out of that I would like to have a voice in the matter.

23663. Then I may propose a rule, it goes to the Home Office, the Home Office advertise it and invite objections, and the men are at liberty to object if they think fit, and then if the rule cannot be agreed upon it should go to arbitration, and if not agreed upon then to a judge of the High Court. Would that meet your view?—That would meet my view perfectly well.

23664. (*Mr. Enoch Edwards.*) How long have you been working in Stirlingshire?—I never worked in Stirlingshire; during the 13 years I have been in Stirlingshire I have been an agent. I worked for 20 years in a coal mine in Lanarkshire, and three years in the copper mines in Cornwall.

23665. During those 13 years in Stirlingshire have there been any Special Rules at all?—There have been.

23666. Have they ever consulted you about them?—No.

23667. Has the inspector consulted you?—We were not consulted at any time.

23668. Or any of the men?—No.

23669. They brought out Special Rules and imposed them upon the workmen without consulting either the union or the men?—Yes. I know of none of us being consulted.

23670. I suppose you are aware that it is not the practice in England?—I have heard that.

23671. And of course it is largely due to the inspector—he has not condescended to consult with you?—That is just it.

23672. He has never asked to meet you or your men?—That is just it.

23673. In representing the views of the men here, you say now they would object to rules being imposed upon them that they have never been consulted about?—Yes.

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23674. Of course those rules may largely interfere with their contract and their wages?—Yes.

23675. You say it is perfectly proper before such rules are passed that you should have an opportunity of considering them?—Yes.

23676. You say you have no fault whatever to find with the inspectors. There are not sufficient?—No, there are not sufficient.

23677. I understood you to say that they visit the collieries occasionally?—Yes, occasionally.

23678. How do you know? Have you met them?—I have met them or seen them at the colliery office.

23679. So that you know they do visit occasionally?—Yes.

23680. Do they profess to make a general inspection?—I question if they come once in twelve months.

23681. Have you seen one down the pit when you have been in it?—I have never seen them down a pit, only after an accident has taken place. I have seen them coming from the colliery and going to the colliery after an accident.

23682. They might be down the pit you worked in without your seeing them?—I have seen them similarly when I was working when an accident occurred.

23683. What is your view about these inspectors? Do you think their districts are too big?—With respect to some of our collieries their districts are too big.

23684. I am referring to the Government inspectors?—There are some who consider that they should have a certain number of men, and some have gone the length of saying 10,000. I may differ here, because I might think in a place where the men are congested there might be some places where 500 would be ample, and it is easier to inspect that pit with 500 men than to inspect five pits with 100 in each.

23685. It might be?—Yes.

23686. Much would depend upon whether they were old pits with extensive ramifications, and so on?—Yes.

23687. Scotland, for the purpose of inspection, is divided into two districts?—Yes, east and west.

23688. Have many men have you employed in Stirlingshire?—I think there are between 7,000 and 8,000 miners in Stirlingshire.

23689. How far would Stirling be from the office where the inspector lives?—I think it is Glasgow in our case—about 20 or 30 miles perhaps from Stirling.

23690. From the centre of your colliery how far would it be?—Pretty much the same, I should think.

23691. You agree that the number of inspectors is altogether insufficient? — Altogether insufficient to overcome the work satisfactorily.

23692. I understood you to suggest that the same thing applies to the firemen's inspection?—Yes, to some extent.

23693. You do not suggest at all the firemen are incapable of doing all the work at all the pits?—No, I am not going to say that, because we have some very small pits in Stirlingshire.

23694. What are the class of men?—In some cases we have young men, and in some cases they are men up in years.

23695. Would a young man have had experience?—We object to the young men because we do not think their experience is quite sufficient. With respect to the old men their judgment is good, but their physical ability causes an objection.

23696. Young men have very practical knowledge sometimes, but you would like to have a very young man with the head of the older man on his shoulders?—I think no man under 25 should act as a fireman and have a certificate of competency, at any rate.

23697. Do they appoint firemen under 25 years of age?—Yes, I think so, but I am not exactly prepared to say. I think we have one who does that work under that age.

23698. Do you suggest to this Commission, having regard to the importance of the office that a fireman holds, the colliery company would appoint a man under 25 years of age?—Yes, I think we have one.

23699. I do not want to press it too much, because he may have the certificate of a manager to manage a pit at 25?—Yes, that is so.

23700. After all, there would be some grounds for appointing him fireman?—Yes.

23701. You think they are rather young and they should have more experience?—I do.

23702. What wages do you pay them generally?—We are trying, wherever we possibly can, to get the standard wage.

23703. How much do you pay the fireman?—We have them from 5s. 3d. to 6s. 6d. now.

23704. Are they members of the union?—I am glad to say most of them are.

23705. We have been told that the reason why they are not a better class of fireman is because they do not receive more wages. If he is a member of the union he will have more than 6s. a day, or he will not work?—Something like it.

23706. They receive from 5s. 3d. to 6s. 6d.?—Yes.

23707. Is there much prosecution by the owners in the courts in your district?—No, not a great deal of that.

23708. Nor fining?—There has been an exceptional case now and again.

23709. It is not carried on to a large extent?—No.

23710. Do they fairly maintain the discipline of the pit?—On the whole, I think they do.

23711. I understood you to suggest that you and your people have taken means to advise men?—Yes, although we may consider that these Special Rules in particular may be severe, we do advise the men to abide by them, and in no case to break them.

23712. Their safety would not be worth much unless they were observed. In all your efforts you do advise the men to observe the rules?—Yes.

23713. I understood you to suggest that one of the reasons why you cannot keep these rules was because your living depends upon the amount of coal you send out?—That I give from my personal experience.

23714. Do you suggest that men should work day wage?—I would be in favour of time before the present system.

23715. Is that the opinion of your men in Stirling?—There is a division of opinion on the matter, but that is the prevailing opinion.

23716. Would your contractors who are in favour of men who know the work be ready to agree to day wages?—Contractors, I am sorry to say, employ men, and it does not matter whether they have been in the pit before or not. We have a great deal of trouble with them.

23717. That is an irregularity which you have not been able to conquer?—Yes.

23718. You do not suggest that Stirling would be prepared to accept the position of a day wage?—I am not prepared to answer that.

23719. They would not advise you to recommend it here?—The question has not been before the contractors.

23720. You are expressing your own views?—No, the prevailing opinion of the body of miners in Stirlingshire.

23721. All your work is done by contract?—It is all done by tonnage rate.

23722. There is not much coal got by day wage?—No, we have contractors who take headings or levels and employ the men to work them. That is what we term "contractors."

23723. Who work for them?—Yes, by contract. The men are paid by time or tonnage rate, but the contractor is paid by the output, and he pays those men.

23724. Do you mean that the contractors employ them? Do you mean to tell me that three or four men will take a pit contract and pay a man a day wage?—We have not got to that extent. We have contractors employing 20 men, and they pay sometimes so much per shift, and sometimes so much per ton.

23725. In that case, they are contractors too—they sub-contract with the chief contractor?—Yes, you can put it in that way if you like. We do not know what contract the contractor has made with the employer.

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Mr. William Webb.

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23726. The earnings of the men working by contract run higher than day wage?—We have found that in brushing particular.

23727. You are not prepared to say that all the people engaged in the industry would be prepared to work day wage?—It is a prevailing opinion among our men that they would like so much an hour like joiners and carpenters, and those sort of men.

23728. (*Mr. Smillie.*) Mr. Edwards is concerned to know whether the rank and file of your coal getters now paid by the ton, would be willing to accept a condition of matters in which they were paid daily wages. Is that in your opinion fairly prevalent?—I think it is fairly prevalent among our miners.

23729. (*Mr. Enoch Edwards.*) Who are not contractors?—No. We do not call them contractors at all. We call those ordinary getters of coal.

23730. Is that a new system—a man taking a place and employing so many men?—It is more particularly in the new collieries which we have started in Stirlingshire, and the employer gives the headings or levels, as the case may be, or branch to a contractor, and the contractor finds his own men, and pays them what wages he thinks reasonable.

23731. That is why he is driving out his work?—Yes.

23732. It would not follow when the pit is open when the men will take their own stalls?—Yes, of course.

23733. (*Mr. F. L. Davis.*) You say although the men complain sometimes of the discipline being rather stiff, that you advise them nevertheless, to obey the rules and regulations?—Yes, for the time being.

23734. What do you mean by the discipline being stiff. In what direction is it stiff?—There is a Special Rule about the gibbing of corks, that props must be placed a certain distance from each other.

23735. Now I want to ask you with regard to the timbering rules?—That is in the Special Rules: sometimes a fireman may find this is not done. We tell the men in all cases to do what the Special Rule tells them to do.

23736. Do you use your influence with the men to persuade them to carry out the rules whatever they may be?—Yes.

23737. I think you said that you were in favour of more Government inspectors being appointed?—Yes.

23738. Would you suggest that they should belong to a different grade or class from the present inspectors, or that they should all have the same qualifications and pass the same examinations?—I am perfectly satisfied with the ability of the present Government inspectors, and I even think that men from the rank and file, the workers themselves, who have had practical experience, might do.

23739. Would all these practical men in your opinion have to pass the same examination?—They would have to pass an examination to make them competent for the duties which they have to perform.

23740. Would it be the same examination as the present Government inspectors have to pass, or a different grade?—So far as the inspection of the mine is concerned by His Majesty's inspectors, I would be in favour of having them the same as they are now.

23741. Do you ever draw the attention of the Government inspectors to anything wrong which comes before you?—Yes, I do. I have drawn the attention of the Government inspectors to the want of air-current, and I am glad to say when I have, that they have given their attention to it, but if we were to draw the attention of the inspector every time the miners complained to us, they would be continually there.

23742. Do you find whenever you make a complaint that they come as quickly as they can and look into the matter?—Yes, but if we find a complaint by the workmen about the air, we mostly go to the manager and arrange to have it improved, and if it is not improved, we write to the Government inspector.

23743. That is quite right, I think. I am not going into the particulars of the case you gave, but I think you said that there was a general complaint amongst the fireman that they had to sign a book giving a false report?—I did not say that it was a general complaint, but these complaints I have heard frequently.

23744. Have you ever made any complaint to the Government inspectors about that?—No, I have not.

23745. That is a point which you would not go to the management about naturally, but if you thought it was such a serious thing as it appears to be stated to be by everyone of you here, why have you not drawn the attention of the Government inspector to it?—That is a very reasonable question to ask; but I might go a little further in reference to this matter. It is after the man has left the colliery that he says what has been done.

23746. Then I should think all the more reason why you should have drawn the attention of the Government inspector to this, that it is not an exceptional thing, but rather a general thing, having these complaints, so that you should put him on his guard and let him ferret it out for himself?—I have not drawn the attention of the Government inspector to the matter.

23747. If it is as serious as you try and make us believe it is, you certainly have not been doing your duty in not drawing the attention of the Government inspector to it?—We might have been too lenient.

(*Mr. F. L. Davis.*) We all make mistakes, I know.

23748. (*Dr. Haldane.*) I think you mentioned that you had worked in Cornwall?—Yes.

23749. Where have you worked?—Liskeard, in the East and West Caradon mines.

23750. Are you familiar with the arrangement they have in Cornwall for providing a drying place and a place for washing?—Yes, I have often wondered why it was not carried out here.

23751. Are you of opinion that it would be a benefit?—Yes, a benefit to the health of the miners.

23752. The arrangements in Cornish mines are not always very good. I do not mean to say that there should not be something better, but you are clearly of opinion that it would be a good arrangement?—Yes, a good arrangement.

23753. I mean an arrangement for leaving the pit clothes at the pit head?—In charge of the dryman.

23754. And combined for arrangement for washing?—Of course.

23755. Do any of the Cornishmen come up to Scotland, that you are aware of? You are the first Cornishman I have met here?—There are a few in my friend's district in Lanarkshire here.

(*Mr. Smillie.*) There have not been many new ones for a considerable number of years, but there are in Lanarkshire probably 100 families and they are now married and intermarried. They have been here 35 years.

23756. (*Dr. Haldane.*) It is not the custom for men to come up to Scotland for special kinds of work like pit-sinking?—No, it is not very prevalent.

23757. Or driving roads and stone?—No.

23758. Are you aware that they have a disease down there that is giving some trouble?—Yes.

23759. You do not think that any Cornishmen who might be affected come up this way?—No, I do not think he would: he would stay at home.

23760. They do not stay at home: they go to Wales?—They go to Wales much more than Scotland: it is much nearer.

23761. (*Chairman.*) Mr. Ellis has suggested if you have this system of timbering by men specially appointed for the purpose, it is like saving a man, so to speak, in spite of himself. I would suggest on the other hand, if you pay a man by the piece, and if it should so happen as it happened to you, he would lose rather a serious amount of his wages if he was to knock off his work in order to prop up a roof, that is something like leading a man into temptation?—The man would not require to knock off his work.

23762. Under the system you were working when you noticed that the roof was in a somewhat dangerous condition you would have been obliged to knock off work and to have fined yourself some shillings. That is what it amounted to.

(*Mr. Ratcliffe Ellis.*) The tonnage rate which is paid is arranged on the assumption that the timbering is done by the management.

23763. (*Chairman.*) No doubt it was—I will not say a dereliction of duty on your part—but it was taking a risk that you ought not to have taken?—Yes.

23764. In order to save a few shillings?—Yes, it may be only 1s.

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23765. In order to save 1s. you took the risk?—Yes, that is just it.

23766. Mr. Ellis suggested that it would be hard on the management in such a case as that where a man, to save a comparatively small sum of money to his own pocket, takes a risk he ought not to have taken and the management should be put to any expense through a man having acted in that way. This is the way Mr. Ellis puts it. That the management did give the men warning it was their duty, and that they were paid on the assumption that they did knock off a sufficient number of hours from their work to sufficiently timber the roof. That is the contract between you and the management?—Yes.

23767. On the other hand, human nature being what it is, it is rather like leading a man into temptation I should say?—Yes.

23768. If you accept that view that where a man is put in a position where his safety may conflict with his monetary interest, it appears to me that one must go further than one does in the matter of supervision of the men. Surely we now do protect men against their carelessness?—Yes.

23769. For instance, in shot-firing there is no doubt the rules are made to protect men against their carelessness?—Yes.

23770. To some extent those rules may put a certain amount of small expense on to the management. I am inclined to take the view that it might be advisable, and that it is not such a great hardship on the management that they should be put to some expense with the view of placing the men in a position in which they shall not be exposed to a certain amount of temptation, because, although it may be true succumbing to the temptation is a culpable thing, still, by putting them into that temptation, human nature being what it is, every now and again they will succumb to the temptation, and that will mean an accident. What I put before you is this. It might be said that there is this difference between shot-firing and timbering, that the man that neglected to put up timbering endangers his own life, whereas in shot-firing he endangers the lives of other people?—Yes.

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23771. In this way I would also put it that a man's life is not merely his own concern, it is the concern of his wife and family as well?—Yes.

23772. Therefore I think that there is a very fair analogy between the case of a man who, by the system in vogue, is led into the temptation of not taking as much care of his life as he ought to by want of timbering and the analogy of a man who by putting in a careless shot endangers not only his own life but the lives of others. I would rather suggest that it might be the duty of those who are commissioned to look after the safety of the miners to see as far as possible that the system of working is such that a man shall not be led into temptation. That is rather the point of view I should look at it from. I do not know whether Mr. Ellis would like to say anything about that.

(*Mr. Ratcliffe Ellis*). I should differ from that.

23773. (*Chairman.*) I suppose you say that the whole system should be to some extent altered, and the contract between the men and the management should be different from what it is at present as regards timbering. We will not take into consideration day wages or piecework. The contract at present is that the man himself is responsible for the timbering?—Yes.

23774. He is paid on the supposition that a certain amount of time is taken up with timbering.

(*Mr. Ratcliffe Ellis.*) Whatever is necessary.

23775. (*Chairman.*) That form of contract encourages a man to take certain risks which he ought not to take. That is your argument, that the form of contract encourages you to take certain risks which otherwise you would not take?—Yes.

23776. Therefore the better plan would be to alter the contract between yourself and the management, and to say that the management should be responsible for the timbering, and you only for the hewing, and that being the case you would be willing to enter into another arrangement with the mine-owners with a view to finding out what would be a fair wage for the hewing?—Yes.

THIRTY-FIFTH DAY.

Wednesday, 26th June, 1907.

PRESENT:

Lord MONKSWELL (*Chairman*).

WM. ABRAHAM, Esq., M.P. (Rhondda).
F. L. DAVIS, Esq.
ENOCH EDWARDS, Esq., M.P.
THOMAS RATCLIFFE ELLIS, Esq.
JOHN SCOTT HALDANE, Esq., F.R.S.
ROBERT SMILLIE, Esq.
S. W. HARRIS, Esq. (*Secretary*).

Mr. WALTER MARRIOTT, called and examined.

23777. (*Chairman.*) I understand you attend here on behalf of the Derbyshire Miners Association?—Yes.

23778. Please tell us what are the objects of the Association, and how many members it has?—The objects are, to a great extent, to secure benefit for its members, the members numbering 33,200 odd.

23779. The objects are to do the best you can in their interests?—Their interests, and securing the safety of the miners that they represent.

23780. (*Mr. Enoch Edwards.*) The rules, I suppose, set out the objects?—Yes, they do, and I will send you a copy.

23781. (*Chairman.*) With regard to the prevention of accidents from falls of roof and sides, you think they could be prevented, first, by adopting systematic timbering in gateways and roadways which are in close proximity to the working face, and are, therefore, not thoroughly settled?—Yes.

23782. What do you mean by systematic timbering?—By systematic timbering I mean setting timbers at a certain specified distance, whether the roof is hard or soft.

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23783. Who is to specify the distance?—The manager.

23784. Would you leave it entirely to the manager to specify the distance?—To the manager and the inspector of the district.

23785. Do you suggest the manager and inspector of the district should consult with the men, or not?—I do not think they should.

23786. You think the manager and the inspector of the district should settle the maximum distance between the props?—Yes.

23787 In regard to the particular kind of roof that they have to safeguard?—Yes.

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23788. In the same mine you might have a different maximum distance for different classes of mining ?—Yes. I may say we have a systematic timbering along the face.

23789. I do not know whether these Special Rules apply everywhere, but I think they do apply t any rate to the mines that are looked after by your Association, and for a long time it has been the practice to say that a maximum must be settled ?—Yes ; that applies to our Association but only along the coal face, the working face. This systematic timbering which we propose is in the gateways and the roadways leading from the working face.

23790. Your complaint is that there is no Special Rule as to systematic timbering in the gates ?—Yes.

23791. Would you be content if the Special Rules which are now in force with regard to the working faces were put in force in regard to the gateways as well ?—That would content us.

23792. That is, that the manager shall keep posted up a notice specifying the maximum distances ?—After consultation with the inspector.

23793. Would you suggest that the rules should be strengthened by bringing in the mines inspector as well as the manager ?—Yes.

23794. You would say that the manager, in order to specify the maximum distance, should consult with the mines inspector ?—Yes.

23795. And should the mines inspector be able, in case of disagreement, to fix a maximum distance himself, over the head of the general manager ?—Yes, I think he should.

23796. You think he should be the supreme person to decide ?—Yes.

23797. Both with regard to the working faces and the roadways ?—Of course, the working faces are settled to a great extent.

23798. Between the manager and the inspector ?—And the men. The manager posts up the notice of the maximum distance between the props, and that has to be carried out, whether the roof is hard or soft. I am not aware that there has ever been any dispute, after the manager has posted the notice, with regard to the men carrying it out.

23799. The present system of Special Rules with regard to the working faces works quite satisfactorily ?—Yes, on the working faces.

23800. And all you desire is that the same Special Rules should apply to the roadways as well, and that is all ?—Yes.

23801. You think that safety might be increased by leaving more to the discretion of the stallman as to what timber it is very dangerous to withdraw from the wastes or gob ?—Yes.

23802. Will you explain your views as to that ?—Well, this is actually what takes place : the stallman is selected for his practical knowledge and his qualification for looking after the safety of the mine so far as setting timber is concerned, but when it comes to the withdrawal of the timbers from the gobs there is no discretion allowed to the workman, the timber must come out. We have cases where the manager or the deputy knows it is practically impossible to recover that timber, but it must be cut, and allow the roof to fall. We contend that that is an unnecessary danger.

23803. How do you mean that it must be cut or withdrawn ?—There are certain cases where the roof is so heavy that when you take the props out by any means the roof falls and immediately bursts down. The stones are so large that it is impossible to withdraw the timber, and the result is that the prop has to be buried eventually. But we must take it from under the roof ; we must cut it out, although the management knows it is going to be buried immediately that we take the weight off.

23804. I do not understand how there can be any "must" about it ?—Well, it is so.

23805. (*Mr. Ratcliffe Ellis.*) This is withdrawing the timber after you leave the face ?—Yes. It is in the waste.

23806. Why do you want it to remain ?—Because in certain cases it is too dangerous to withdraw it.

23807. (*Chairman.*) You think in some cases it is so dangerous to withdraw the props that they should be left where they are, in the waste ?—Yes.

23808. Are there not any means of withdrawing the props which prevents the withdrawal being dangerous ?—Yes.

23809. (*Mr. Ratcliffe Ellis.*) Have you not a gablock and chain for the purpose of withdrawing it ?—Yes.

23810. (*Chairman.*) You mean the mere process of withdrawing is dangerous ?—Yes.

23811. And as it cannot be withdrawn without being dangerous it should be left alone ?—Yes, we contend it should be left alone.

23812. (*Mr. Enoch Edwards.*) You are pleading rather that the men in charge should have some discretion ?—Yes.

23813. (*Chairman*) I understand that there is a particular man whose duty it is to use this gablock and chain in withdrawing the props ?—Yes, the stallman.

23814. Does he do anything else besides that ?—Yes, he has to do the work of coal getting.

23815. He is deputed to look after the props as well as to get the coal ?—Yes.

23816. He is not in any position of authority ?—No ; he is an ordinary collier, the principal man in charge of the stall.

23817. (*Mr. F. L. Davis.*) Every collier is in that position, is he not ?—Not every collier. There are, perhaps, two contractors or stallmen in charge of two or three others, and, in some cases, more—it depends upon the length of the stall and the speed the company want it to proceed at. In some cases there will not be more than two or three men besides the contractor, and in other cases there will be 12 or 14 men.

23818. (*Chairman.*) How many of the 12 or 14 men would have authority to withdraw the props ?—Two.

23819. There are always two in such cases ?—Yes.

23820. What do you say with regard to the prevention of accidents on haulage roads ?—I think you divide your evidence into two parts, viz., where the haulage is done by horse, and where it is done by endless ropes. First of all, what do you say with regard to horse haulage ?—I think that wherever the haulage is done by horses the road ought to be of sufficient width to allow the lad or the driver to pass freely along at least one side of the tubs the whole length of that road.

23821. Have you known any cases where the road is of sufficient width and where it has been blocked up, except, of course, at the entrance to the manhole, in such a way that it would be difficult for a man to walk along ?—Yes, any number.

23822. It is necessary by law that the manholes should be kept free ?—Yes.

23823. You say whether it is necessary by law or not, it is not the case that the side path is always kept clear the whole length of it ?—Yes, and we think it ought to be compulsory that the whole length of the road shall be of sufficient width to allow the driver to pass by the tubs.

23824. And that the whole of that path at the side, which must be of sufficient width, should also be kept clear, so that any man could at once step off from the middle of the road to the side without any obstruction, if he saw anything coming ?—Yes.

23825. That, you say, is not the case ?—Yes.

23826. Even where it is of sufficient width there are often such obstructions by the side that the man could not step off into safety at once ?—Yes.

23827. You think that should be remedied ?—I do.

23828. First of all you want the road to be of sufficient width to allow a pathway on one side ; and, in consequence, you want a rule that that path should be kept clear ?—Yes.

23829. Have you any other suggestions to make with regard to horse haulage ?—No.

23830. Now what do you say where the haulage is done by endless ropes ?—Where the haulage is done by endless ropes we want a system of clipping or attaching the trams to the rope that is safe to be taken off and put on. We have systems that we do not consider safe. I have brought you drawings here of two different kinds of clips, both in use in our immediate district, one of which we consider a fairly safe clip, and the other we think is a dangerous clip.

23831. Can you point to any statistics of accidents to show that one is safe and the other dangerous ?—I cannot point to statistics, but I know accidents are continuously happening at our own colliery.

23832. You say they are happening continually where one kind of clip is employed, and not where another kind of clip is employed ?—Yes.

23833. (*Mr. F. L. Davis.*) Is this a clip between each tram ?—No, it is between the trams, or the run of trams, and the ropes.

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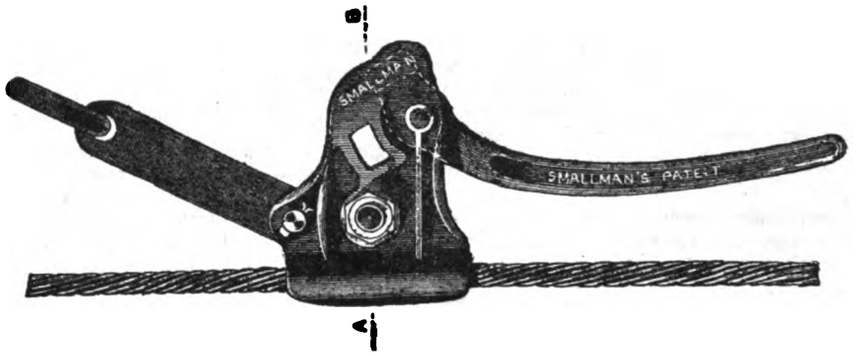
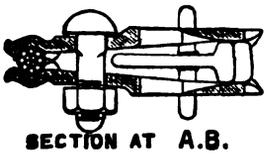


Fig. 1



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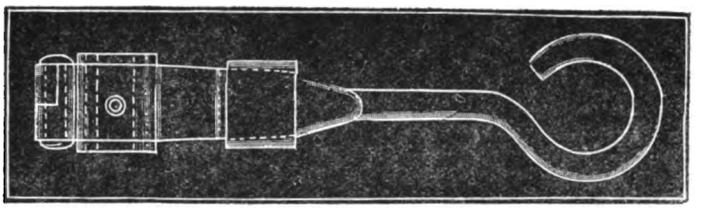

Fig. 3.

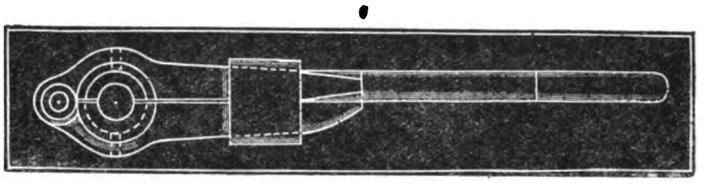

Fig. 4

23834. (*Mr. Smillie.*) It takes the place of a bogey ?—Yes.

23835. (*Chairman.*) You put in the drawing of a clip which you consider to be safe ?—Yes; the Smallman clip (Figs. 1 and 2) is what I consider safe, and the Fisher clip (Figs. 3 and 4) is what I consider dangerous. I think where haulage is done by endless ropes, which practically means having a double road or a road for the empties and a road for the full ones, that the roads ought to be of sufficient distance apart to allow a person to stand between the trams. There are many accidents happening through people being crushed between the two trams passing up and down.

23836. You would not consider it sufficient that a man should be able to step aside when he sees trams coming, but you say where there is a considerable number of trams coming in different directions along the same road the gangway between the trams ought to be wide enough to enable a man to stand there in safety ?—Yes, and for this reason: at these junctions where the trams are clipped or coupled on to the rope, at the moment that the clipper-on or the boy is attaching the full or empty tubs to the ropes, whichever it may be, there is perhaps a run of trams coming down on the opposite road, and there is no room for him to stand between, and if he steps from before the trams he is clipping on he more than likely steps before the trams coming in the opposite direction, and therefore gets run over. We think the roadway ought to be of sufficient width at those points that the clipper-on can stand between the two runs of tubs safely.

23837. If you had a gangway between the two lines of trams it would not be necessary to have another path on the other side—or do you think there should be a path on each side, and a gangway in the middle ?—It applies to two different roads.

23838. You would not want a pathway on the side of each as well as a gangway in the middle ?—No.

23839. The gangway in the middle would take the place of the path at the side ?—Yes.

23840. What do you say about accidents arising from trams running away in consequence of getting ropes or chains broken ?—I think there should be backstays or drags used to every run of tubs.

23841. Would you say that the manager should have no option in the matter, and that whenever a full load is drawn you should have that arrangement ?—Yes.

23842. You say it should be compulsory in every case ?—Yes.

23843. It should not be left to the management to decide ?—No.

23844. Have you anything else to say about haulage accidents ?—No.

23845. With regard to shaft accidents; first of all to deal with the question of preventing men from falling or being thrown off the cage whilst descending or ascending, what do you say with respect to that ?—We believe that wherever a cage is used for lowering or raising persons there should be a door across the whole width to prevent persons being thrown out of or falling from the cage. At present at many of our collieries we have simply a bar put across, which simply drops in a slot, and the result is very often that the men riding up and down put their hands on that, and if anything happened in the shaft it is more than probable that their hands would go up, and the bar would go off. But if nothing takes place, then the bar is at least a yard from the bottom of the cage, the cage bottom is composed of steel or iron plates, and if the cage gets into an inclined position it is very liable to throw the men off. We contend that such a terrible thing as a shaft accident takes away the presence of mind of the man for the time being, and even if he had hold of the side rods provided, it is more than probable that the jerk of the accident would cause him to take his hand off that rod, and he would be shot down the pit shaft, which happened in the "Shirebrook" case not long ago. We contend that wherever a cage is used for lowering or raising persons there should be a gate across to prevent men falling or being thrown off.

23846. The protection you suggest is a gate at the side of the cage ?—Yes.

23847. How do you deal with the matter of preventing cages from falling down the shaft in the case of over-winding ?—Well, it is not to prevent cases of over-winding, but it is to prevent the men from falling down the shaft again after they have been over-wound. What we think should take place is this: it ought to be made compulsory that there should be a set of props fixed up in the headgear, not more than two feet away from the bottom of the cage, when the King's Patent, as we call it, or the detaching hook goes through the King's Patent—because when over-winding takes place it is very probable that the cage is going at a terrific speed, the chains are slack, and the weight of the cage gives the falling back a terrible force, which is liable to break the King's Patent, or allow the cage to go back on to the props at the surface. We contend if props were put on the headgear which were constantly in, as soon as the cage went through the props would shoot in in a case of over-winding, and catch it before it has got the terrific force it has in falling to the surface.

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23848. Your suggestion is that if the cage gets over-wound those props would immediately, by some mechanical contrivance, prevent the cage falling down any great distance?—No, not by any mechanical contrivance, but they should be permanently fixed up in the headgear, not more than two feet away from the bottom of the cage.

23849. (*Mr. Ratcliffe Ellis.*) It is to prevent the cage going down the pit?—Yes.

23850. (*Chairman.*) Some contrivance by which, at all events, if the cage is over-wound, it should be only able to fall back a very small distance?—Yes.

23851. There are other contrivances which automatically decrease the speed of a cage in the case of over-winding—that when it gets to a certain height the speed is automatically slackened, and the over-winding can be prevented?—I have read about them, but I have never seen them in use. We are of opinion that if it is possible to secure such an arrangement it ought to be compulsorily applied at every colliery.

23852. (*Mr. Ratcliffe Ellis.*) You think it would be better to prevent over-winding than to minimise the mischief of over-winding?—Yes.

23853. (*Chairman.*) You know yourself of a fairly good contrivance to minimise the effect of over-winding, but you have no personal experience of the other kind of machine?—No.

23854. So that you cannot express any opinion as to the efficacy of the machinery which prevents over-winding, but if it could be done you think that would be the best means of dealing with the matter?—Yes.

23855. Have you anything to say about reducing speed when winding men up and down?—Yes, I can speak of that from practical experience. In our modern collieries to-day they wind men at such a terrific speed, when the cage starts from the bottom during the first half of the winding, that it requires a man with very good knees to stand the terrific pressure applied. Then after they pass what we call the meeting place, or the centre of the shaft, the speed should begin to be reduced.

23856. Rule 26 of the General Rules is: "If in any mine the winding apparatus is not provided with some automatic contrivance to prevent over-winding, then the cage, when men are being raised, shall not be wound up at a speed exceeding three miles an hour after the cage has reached a point in the shaft to be fixed by the Special Rules." You say that in all cases there should be some rule preventing cages from going beyond a certain speed while men are being wound up?—What we find from practical experience is this: during the first half of the winding they gain a terrific speed, and the result is that during the second half of the winding they appear, from what we can judge as practical men, to have to turn the steam against the engine on purpose to stop, for the simple reason that they have the great weight of the rope going down pulling against them, consequently in the second halt the cage proceeds in a very jerky manner. We think you would be able to get expert evidence to say what speed should be allowed when they are winding men.

23857. Your Association has no opinion to give as to the limit of speed?—They have no expert evidence.

23858. They want expert evidence taken on that matter?—Yes.

23859. So as to prevent the unpleasant jerks which might be harmful to the men?—Yes.

23860. You complain of the jerks?—Yes.

23861. But even then during the first half the men are in a very uncomfortable position?—Yes, in a very uncomfortable position. It is a very anxious time for the men when they are being wound up and down the pit shafts, and we think the speed should be such as to reduce the danger to a minimum when winding the men.

23862. I thought your suggestion was that it might be so uncomfortable to the men as to injure their health, or do their muscles some harm?—That is not what we complain of altogether; but we suggest that when the speed is so great that it is causing discomfort it is also dangerous.

23863. In what way do you say it is dangerous?—We say it is dangerous through going at the terrific speed they do. Accidents are very liable to happen in the shaft.

23864. Do you remember what the three accidents were which have been reported in the last ten years in the Midland District, and what they were caused by?—I do not know what they were caused by, but we wish to prevent accidents. We do know that the accidents are not numerous, but we wish to prevent even those that do take place in shafts.

23865. You have no evidence to show, from any actual accident happening, that the mere pace of a cage has caused an accident, irrespective of over-winding?—No.

23866. Do you want to say something on the everloading of cages when men are being raised or lowered?—We think the law should be altered so that it is left to the discretion or the judgment of the inspector for the district for the time being instead of the manager.

23867. As to how the men should go down in the cage?—Yes.

23868. Would that not be a question on which the men might very well appeal to the inspector?—Perhaps it would: still, we think it ought to be put on a proper footing.

23869. Have they not appealed to the inspector on that question?—I think not.

23870. (*Dr. Haldane.*) Is there not a maximum limit to the number of men to each deck of the cage?—Yes, there is a maximum, but it is left to the discretion of the manager, and the result is that very often the maximum is placed at such a number that it is practically impossible to jamb the men on to the cage.

23871. (*Chairman.*) Is it not also the case that where the management have suggested the maximum number, the men very often of their own free will go up and down in much greater numbers?—That may be so; but even if they wish to commit suicide you should have a right to prevent it.

23872. You say that these Rules, as to the number of men that might be taken up and down in cages, buckets, and so on, should be subject to the sanction of the mines inspector. Is that your suggestion?—Yes, it should be left to the inspector to say what number of men should be allowed to ride on certain cages in his district.

23873. That comes to very much the same thing; the management would probably suggest the number, and they would go to the inspector and say that that was the number they suggested, and ask whether the inspector agreed?—Yes.

23874. What work are you doing now?—Stall-man.

23875. You are yourself a stall-man at the present time?—Yes.

23876. You have practical experience with regard to the withdrawing of the props?—Yes, every day.

23877. What mine are you employed at?—The Pleasley Mine and the top hard seam.

23878. What other seams?—I have worked in the black shale or the Silkstone seam, and the soft coal and the Waterloo seam.

23879. Always in the same mine?—Not in the same mine—in different parts of the county.

23880. Therefore you have very considerable knowledge of the customs of Derbyshire mines?—Yes.

23881. (*Mr. Ratcliffe Ellis.*) What is the name of your colliery?—The Stanton Coal and Iron Company.

23882. With regard to the timbering, you think that an inspector ought to prescribe the distances both at the face and in the roadway?—We are not complaining about the face at all, it is the roadways.

23883. The inspector does not prescribe the distances at the face?—It is put in the Special Rules.

23884. The Special Rules say that the manager is to prescribe the distances, not the inspector?—Yes.

23885. You are satisfied with that?—Yes, we are satisfied with that.

23886. Is not the face the more dangerous place, with reference to the timbering, than the roadways?—I do not know that it is much more dangerous than the roadways immediately in the vicinity of the face.

23887. You are aware no doubt that there are a larger number of accidents happening at the face, in consequence of the timbering or the falls of roof and sides, than in roadways?—Yes.

23888. If you are satisfied with the system which enables the manager to prescribe the distances at the face, why should you not be satisfied that the manager should prescribe the distances on the roadways?—For this reason, at the face in our district the work is done by the stall-man. Immediately we take the roof down after the ripping, as stall-men and contractors getting coal, we have done with

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our responsibility; and after that time the roadway is allowed to what we call "gutter up"; the middle falls out and the sides become dangerous. That is the reason we think systematic timbering should be applied.

23889. That is not quite the point I am asking you about. Systematic timbering means, as I understand, that whatever the nature of the roof may be, props must be set at a certain distance?—Yes.

23890. At the face the manager prescribes the maximum distance?—Yes.

23891. If you had the same regulation to apply to the roadways, why should not the manager also prescribe the distance?—That would be all right, provided systematic timbering was compulsory.

23892. I am dealing with the inspectors. You would leave it to the manager to prescribe the distance?—No, I think the inspector should be consulted in this case.

23893. You say the arrangement is perfectly satisfactory at the face where he is not consulted. Why should not the same safety be secured on the roadways without consulting the inspector?—In the first place I do not know that the inspector was not consulted at the time the Special Rules were framed.

23894. The Rules do not provide for his being consulted; it is the manager?—I think that the rules ought to be applied by the inspector and left to his discretion.

23895. In respect of this timbering?—Yes.

23896. If that is so, would you then relieve the manager from his responsibility?—Yes, if he carried out the instructions of the inspector.

23897. Do you think the inspectors would undertake a responsibility of that sort?—I do not know that. I suppose if it became law they would have to undertake the responsibility.

23898. However, that is your view; that for the timbering both at the face and in the roadways the inspector should prescribe the distances at which the props should be put?—Yes.

23899. Why are you not satisfied with the state of things at the face now?—We are satisfied with the state of things at the face.

23900. Why do you wish to bring the inspector in for that?—We do not want to bring him in, only we say we are of opinion—or we do not know of any other opinion—that the inspectors were consulted when the Rules were framed, therefore we think they should be left the discretion in saying the maximum that timbers shall be applied in the gates.

23901. You have no statistics as to the number of accidents that happen from falls of roof and sides in your roadways?—No.

23902. Are there many?—Yes.

23903. When was the last?—They are continually happening; and the unfortunate part of the business in getting to know the statistics is that they are not all returned to the Government.

23904. When was the last you know of in the roadways?—Not more than a fortnight ago.

23905. In your district you have a very good record, as you know, no doubt, as to accidents from falls of roof and sides?—Yes.

23906. You think it might be improved?—We think that we should be able to get at the bottom of the thing a good deal better if it was made compulsory to report all, which I suppose is going to be done.

23907. That is another question; but matters, good as they are, you think would be improved upon if this suggestion of yours was carried out?—Yes.

23908. With respect to the haulage roads; what is the width generally now on your horse-haulage roads?—The widths vary from 9 ft. to 12 ft. when they are packed out, but during the course of time the packs are pushed in. Falls of roof continually occur in the roadway, and instead of the dirt being moved completely away, it is packed up at the side, and therefore the roads become so contracted that it is practically impossible for a lad to get by the sides of the trams.

23909. To start with they are right?—Yes.

23910. What width are they now generally?—Not more than 3 ft. 6 in. or 4 ft. in width in some places.

23911. That is because you say the stuff coming down has not been taken out, but is packed along the road?—Yes, and the result of the weight pushing the packs until closing them in.

23912. You think so far as the horse-haulage roads are concerned, there should be room made on one side—or do you say both?—On one side.

23913. For a sufficient passage?—Yes.

23914. There is not now?—No, there is not now.

23915. Is that generally so throughout the different seams of the colliery?—It applies to a good many mines. Of course there are some roadways where there is room, but there are others where there is no room for a lad to pass properly.

23916. Are you speaking now entirely in reference to the Stanton colliery?—Speaking entirely of that district; as I say, at some there is room and at some there is no room.

23917. That room might be given without doing anything more than removing the débris which is coming down, and is now packed up at the sides?—Yes.

23918. That is, taking the stuff out of the pit or taking it into the stalls?—Yes, into the stalls.

23919. Where mechanical haulage is used, then you prefer a gangway, apparently, to this room at the sides?—Yes.

23920. It is only when the tubs pass each other that that gangway would be wanted?—That is all.

23921. What is the width of your mechanical haulage road now?—8 ft.

23922. Is that 8 ft. maintained?—Yes.

23923. What width do you say it ought to be?—At least 10 ft.

23924. If you had the passage alongside of 2 ft., you could get it with your present 8 ft.?—I do not think so. Our trams are a little over a yard wide and there has to be a space allowed at either side because it is not possible to get the road perfectly straight and free from abutments. You cannot gauge an underground roadway to an inch.

23925. In order to make the 8 ft. roads into 10 ft. roads what work would have to be done?—They would have to be made and kept wider from the start. They are packed out properly at the start, but they are allowed to get contracted.

23926. When originally made they were 10 ft.?—Yes—some 12 ft. or 14 ft. wide.

23927. And they have become contracted until you think they are too narrow now?—Yes.

23928. Now as to the different kinds of clips and shackles. You want something which will stand the strain better than what you have got now?—That is not it alone; we want something that is not so dangerous during the operation of clipping the tubs on to the rope.

23929. What appliances have you now?—We use the Fisher clip.

23930. So far as standing the strain is concerned, do you have many breakages with those?—No.

23931. So far as the one is concerned which you use, it is satisfactory?—Well, sometimes there are breakages, of course.

23932. You prefer No. 1* clip because it is more easily applied?—Yes.

23933. No. 2† is used, and so far as standing the strain is concerned, it is satisfactory?—Yes.

23934. But it is not so easily applied?—It is easily applied, but it is more dangerous during the operation of application for the simple reason you will see that the hook is hooked into the drawbar of the tram, and the result is the lad, when bending down in this way, before the tram, has not more than 15 inches of the whole length of that clip; and if the rope is rather low for the clip to be applied properly he has to hold the rope up with his toe to get it into the exact position, which you see, in the grooves; and the result is that the moment he puts the loose box down the tram is going at full speed. We consider that it should be made in such a form that the lad could stand away from the front of the tub, and be in a more upright position, and therefore have a better chance of getting away.

23935. Is there any disadvantage in having a trailer at the end of each gang?—I do not think so.

* See Figs. 1 and 2, page 118.

† See Figs. 3 and 4, page 113.

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23936. It is not wanted on the level ?—No.

23937. It is wanted on the hill ?—Yes.

23938. In case of breakage there is a sort of clutch ?—Yes.

23939. You see no reason why that should not be always applied when going up the incline ?—If they were all on the rope, much the same as ours. In some places it is practically flat and in other places it rises. When the run of trams is connected to the rope I do think the back-stay ought to be put on and kept there until it has ended the journey.

23940. As to the gates on the sides of the cages, do I understand you to say you want them on the two sides of the cage ?—On both ends.

23941. The ends are protected at present ?—No, it is the ends we want them on.

23942. The sides are protected ?—Yes.

23943. When you put the tubs into the cage at the bottom or took them out, what would you do with the gates ?—The gates should be made as folding gates. You can see very suitable gates for the purpose on the lifts at hotels. The gate I mean is a gate which folds up into a space not more than 6 inches in width, and not more than about 1¾ inches in breadth, and it can be easily pushed back on each side of the cage.

23944. There is not much time lost in getting the tubs in and out on the top of the pit ?—That is so.

23945. Is the gate which you suggest made of iron ?—Yes.

23946. Is it collapsible ?—Yes.

23947. Who is to move it on one side ?—In the case of winding coal it would not be necessary to have the gates across at all.

23948. Then it would not interfere with the operation ?—No.

23949. But when you are winding men you think the gates should be closed ?—Yes.

23950. You have seen something up here which might be fastened to a cage ?—It simply collapses up. It is a lattice-work gate, and it folds up into a very small compass.

23952. Do you not think that that would get knocked about rather ?—I do not think it would. It could be easily pushed back to the side of the cage and left there during the operation of winding coal, and when they wanted to wind men it could be unfolded and brought across the cage.

23953. Are there many accidents happening from men falling out ?—No.

23954. Do you think there is a source of danger there ?—Yes.

23955. And speaking with your friends about it you think it is a danger against which you would like to be protected ?—Yes.

23956. What speed do you think should be the limit in winding men ?—As I have said, I am not here to give expert evidence.

23957. It is very difficult to say what speed you are going at, is it not ?—Yes, when you are going up a pit shaft.

23958. You think after the passing place the weight of the rope, and so on, accelerates the speed of the cage, and when they require to stop it causes the cage to jerk very much ?—I do not think the weight of the rope is causing it altogether; it does assist because it is a balance against the engine; but, in our opinion, the cause of the jerking is because the speed is so great, and in order to make it possible to stop at the top the steam has to be turned against the engine in the second part of the winding, and that causes the cage to jump.

23959. Is there any greater danger in being wound fast than there is in being wound slow ?—I should say there is a greater chance of the conductors breaking, where they are wood, and also the slides giving way.

23960. You do not find that often takes place ?—We do not get statistics to show when a cage does get out of the conductors. Such cases are not reported.

23961. Have you yourself known of such a case ?—Yes, but not when I have been in the cage. It occurs in the case of coal winding continually.

23962. However, your view is that that is because of the speed ?—Yes.

23963. You think that there should be a limit to the speed when men are being wound, but you are not prepared to say what that limit should be ?—Quite so.

23964. Again, you think that the inspector should approve the number of men who should be wound up and down ?—I do.

23965. What is the maximum now that you know of ?—The maximum number at our colliery is 18 at one shaft and 16 at the other.

23966. It is more than that in some cases, I believe ?—Yes, I believe it is.

23967. Do you think that is too many ?—Yes, for the size of the cage. Our cage where they are winding 16 at a time is over-crowded; and if they happen to be big men a man's back is not in a very comfortable position, when they put the bar on it after the last man.

23968. Everybody is anxious to get down, and more anxious to get up ?—I grant that.

23969. There is difficulty sometimes in keeping order, especially in coming up the pit ?—Yes.

23970. At any rate, you think a maximum number should be prescribed by the inspector ?—Yes.

23971. (*Dr. Haldane.*) Is that number 16 in each deck ?—No, we only wind men on one deck.

23972. (*Mr. Enoch Edwards.*) How long have you worked at the pits ?—I have worked in the pits since I was 13 years of age and I am 41 years of age now.

23973. Has all your experience been in Derbyshire ?—Yes.

23974. You have not worked in the gassy seams ?—Yes, I have worked in the Silkstone seam in Derbyshire.

23975. With reference to the over-crowding of men in the cage, you suggest that that is a matter which should be left to the inspector ?—Yes.

23976. Do you mean the inspector should issue some sort of order ?—I mean the inspector knows the size of the cage, and it should be left to him to say what number of men should ride on the cage in that colliery.

23977. He should fix a number ?—Yes.

23978. You do not suggest he should be there to see it carried out ?—No, he should make a rule.

23979. At your pit you draw 16 at a time ?—18.

23980. Is there proper capacity on both decks to carry 18 ?—16 is at one shaft and 18 at the other.

23981. They are all on one deck ?—Yes.

23982. Have you double deck cages ?—Yes.

23983. They do not use both decks at the same time ?—No one rides on the top deck.

23984. There again, that is different from what takes place in many parts of the country, because at some places no one rides on the bottom deck ?—That is so, I know.

23985. You think with 18 it is over-crowded ?—No, I think that the 16 cage is less than the 18 cage, and therefore I think the 16 men on that particular cage are more over-crowded than the men are even on the 18 cage.

23986. (*Dr. Haldane.*) Why do the men not ride on the top deck ?—Well, it has never been the rule at the colliery.

23987. (*Mr. Enoch Edwards.*) At some they ride on all decks. I saw, myself, at one place, 32 men going down and 32 coming up against them ?—Yes, and there will be a "ship-wreck" if ever a cage accident happens.

23988. You think that should be brought to the notice of the Government inspector, and he should fix it ?—Yes.

23989. As to systematic timbering, I understand you to say that part of the contractor's contract is that he should do the timbering at the face ?—Yes.

23990. And then when he leaves it is no longer his obligation but the company's obligation ?—Yes.

23991. Did I understand you to say that the roads when originally made were from 9 to 12 ft. wide ?—Yes, 9 to 12 ft. wide.

23992. Did you tell Mr. Ellis, in answer to his question, that they are only now about 3 ft. wide ?—Yes, 3 ft. 6 ins. to 4 ft.

23993. How long a period does it take to squeeze the roads up into that small compass ?—It is not a matter of squeezing up; it is a matter of packing the falling roofs and the sides. Of course, the squeezing process assists in contracting the roads, but whenever a fall of roof occurs, in-

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stead of the dirt being removed and stowed away somewhere, it is stowed up at the sides, if there is room for the tram to go past.

23994. They could keep the main road much wider ?—Yes.

23995. You suggest that if the road was left by you when finished, 9 to 12 ft., there is ample room for the men to form a foot road outside the tramway ?—Yes.

23996. So that it is not so much a question of making the road as keeping it ?—That is it.

23997. These mines, which you refer to, are mostly flat?—They rise about one in twelve—they are practically flat mines—but some parts of our collieries rise more than that.

23998. As to the speed of winding, I understand you to say that your experience is that there is too much steam put on to start with, and they run too quickly after they come to the halfway junction ?—Yes.

23999. Have they ever explained to you the object of running so quickly ?—I suppose it is to get the men out as quickly as they can.

24000. If your view is taken of it I suppose it will take much longer both in letting men in and letting them out ?—Yes.

24001. Is there not sufficient time allowed to get the number in or out ?—At night there is any amount of time, and, of course, that does not apply then ; but in the morning we find we have workmen's trains running in, and if the train happens to be late, and there is a large number of men coming later than they ought to do at the pit top, the result is that they go down quicker than usual.

24002. The difficulty I understand you to suggest all along is, when you are coming up the pit ?—Yes.

24003. How does it apply when you are going down the pit ?—It applies in the same way.

24004. As an experienced collier, you say a man is rather more sensitive when being lowered down in the morning ?—He is glad to get up at night.

24005. The effect on the men of letting them down too quickly would be more serious than winding them up too quickly ?—Yes, I have no doubt it would.

24006. However, you think that is done sometimes because these trains are late ?—Yes.

24007. (*Mr. F. L. Davis.*) You told Mr. Ellis you thought the inspector ought to fix the distances in the gateways and roads ?—Yes.

24008. And, I think, you also said that the stallman ought to have some voice in drawing out the timber ?—Yes.

24009. Supposing that to take place, what would happen ?—I have no doubt, in some cases, some of the timber would be left.

24010. You say he should have some voice in it ; but supposing he and the manager disagreed as to whether that timber should be left or drawn out, who is to decide between them ?—I do not know who is to decide then. But I say this, that no man knows better the nature of the roof than the man actually working in it ; and he knows when timber is impossible to be got out. Even when it is taken away from the roof the roof falls and buries it, and it has to stop after all the danger has been run.

24011. Do you suggest where that applies that managers will insist upon having that timber drawn out, although they know it is bound to be buried and cannot be made use of afterwards ?—I would not say the manager, but the instructions which apparently come down to the deputies and assistant-deputies are, that all timber must be drawn—and the timber has to be drawn, and is drawn, or otherwise if not drawn, it is simply cut away from the roof, and the roof falls and buries it.

24012. You do not suggest it is nearly always buried ?—No ; I suggest in certain cases it is buried.

24013. Occasionally it is buried ?—Yes.

24014. The deputy tells you, in his opinion, you must take it out ; he thinks it will not be buried, and he will be able to save the timber ?—In some cases he knows perfectly well it will be buried.

24015. You say that is not general, but in some cases it is so ?—It happens continually in our working experience.

24016. What do you suggest should be done ? You say the stall-man should have some voice in the matter as to whether it should be drawn or not ?—Yes. I say when a stall-man can give satisfactory evidence that it is unsafe to draw that timber, it should be left to his discretion to let it stop.

24017. And the manager or deputy have no word in it at all ?—No.

24018. (*Mr. Ratcliffe Ellis.*) You have no Special Rule about the withdrawing of timber at all, have you ?—No.

24019. (*Mr. F. L. Davis.*) Have you ever heard of any accident arising because there was a gate at the end of the cage, and the men not being able to jump out ?—No.

24020. I believe there was a case where an accident did happen because of that ?—I do not know of it.

24021. As to this jerky action of the cage, in consequence of turning the steam against the engine, do you say that is a thing which is happening constantly, or is it an occasional thing ?—It is happening constantly.

24022. If it does, does it not put a great strain both on the rope and on the engine ?—Yes, we believe so.

24023. Is that not, in your opinion, against the interest of the management ?—Perhaps it is.

24024. I cannot help thinking you must be exaggerating it a little ?—No, I have not come here to exaggerate ; I have come here to give my practical experience.

24025. I cannot understand any manager, in his own interests, allowing that state of things to happen where there is a constant jerk like that on the rope ?—The jerk is not such as the bull chains, for instance, getting slack, but it is the reducing the speed and then going off again.

24026. (*Dr. Haldane.*) Can you see whether there is a jerk on the drum ? The drum is not jerking, is it ?—I do not know. I have not been in the engine-house ; I am on the cage.

24027. (*Mr. Enoch Edwards.*) It is the cage that is jerking ?—Yes.

24028. Is that not because the rope is like a piece of elastic, and it gets a little longer and a little shorter ?—I do not think so. I do not think it is a case of expanding the rope.

24029. (*Mr. F. L. Davis.*) I should have thought, if it is as you describe it, the managers would soon find out it was not to their interest to wind in that way, because it seems to me there would be severe strain on the engine and the rope ?—Well, it is so.

24030. (*Mr. Enoch Edwards.*) It perhaps does not jerk the manager when he is going down ?—Perhaps that is it.

24031. (*Dr. Haldane.*) You notice the jerking just as the cage is starting at the bottom ?—No, it is not that, it is simply in the second half of the winding. They simply take you up, on some of the modern cages, as if you were going to heaven.

24032. I thought you said the jerk was just at the start ?—It is simply in the second half of the winding.

24033. (*Mr. F. L. Davis.*) They start you like starting a train, do they not, with scarcely any feeling of movement, and then increase the speed quickly ?—Yes, and very quickly.

24034. But without any jerk to start with ?—Yes. If you stand against any of the engine-houses with these powerful modern engines, you will observe that when they get within a short distance of the top the engine simply begins to give a cough with the steam being turned gainst it. In my opinion, that is what takes place.

24035. (*Mr. Smillie.*) That is done when they are winding coal just the same as when they are winding men ?—Yes.

24036. (*Mr. F. L. Davis.*) I was going to ask you this question : do you think that this takes place in the same way when winding coal as when winding men ?—Yes, I have no doubt it does, and perhaps more so.

24037. I do not quite understand it, I am sure. If it is constantly going on there must be a tremendous strain both on the rope and on the engine ?—There is just this in it, when they are winding coal there is perhaps from two to three tons of coal on the front cage, and on the end cage there is only the empty load, and the result is when it gets towards the top that coal helps to have a steadying effect upon it—whereas winding men it is not so heavy.

24038. You suggest that the inspector should state the number of men to be taken in each cage in his district ? Yes.

24039. Would that not be putting some new responsibility on the inspector ?—Yes.

24040. Which he has not got at present ?—It would do so.

24041. Do you think he would like that ?—Well, I do not suppose he is different from anyone else ; he does not

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like more work put upon him, but even if he did not like it, as I say, if it was passed into law he would be obliged to do it.

24042. I do not mean that the inspectors would object to the work, but object to having the responsibility, and in that way taking the responsibility off the manager ?—I do not see that he would take the responsibility off the manager of the mine, if he gave instructions for a certain number to be taken at a certain colliery. The responsibility of the manager would remain just the same, to see that not more than that number went.

24043. You would have him take upon himself the responsibility of fixing for each colliery how many should be wound ?—Yes.

24044. (*Mr. Enoch Edwards.*) They need only fix it once ?—That is all.

24045. (*Mr. Smillie.*) In addition to your practical experience, do you hold a certificate of competency ?—Yes.

24046. I believe you hold a second class manager's certificate ?—Yes.

24047. Have you, during your experience underground, ever seen a Government Inspector making an inspection of the mine ?—Yes.

24048. How often do you remember that having taken place ?—Not very often. You come in connection with him seldom, but very often he is in a district when you are not there. I have not seen a Government Inspector for a long time, but it has not been because he has not been round the district, but because I have not happened to be present when he was making the examination.

24049. If a Government inspector in making his examination found any part of the mine unsafe—a bad stone hanging, for instance, and instructed the manager to put that right, do you think that would be taking the responsibility off the manager ?—No, I do not think it would. I think if he ordered it to be put right, it would be the duty of the manager to put it right.

24050. Do you not think it would be the duty of the inspector that he should instruct the manager to put it right ?—Yes.

24051. But you do not think that would be taking the responsibility off the manager ?—No.

24052. In the same way if he attended to the gateways and roadways, as you have explained, that would not be taking the responsibility off the manager ?—No : only he would have to give orders that those instructions should be carried out.

24053. At the present time there is no systematic timbering of the gateways and roadways ?—No.

24054. And, as a consequence, there are continuous falls taking place near the working face ?—Yes.

24055. What is the nature of the roof ?—We have what we call a rock roof, which is a strong roof, and we have a binding roof, which is a tender roof : and the binding roof has a tendency to slip itself up into a narrow gutter.

24056. And there is no timbering done in that part ?—In some cases there is not.

24057. They simply depend upon it getting up into the gutter and stopping there ?—Yes.

24058. The sides simply meeting and binding one another in ?—Yes.

24059. In the meantime most of that debris is thrown to the side ?—Yes.

24060. And that is what blocks up the sides of the road ?—Yes.

24061. I suppose there are many minor accidents which take place that are not reported to the Mines Inspector ?—Yes, many.

24062. What you suggest is that there should be sufficient room in the sides of the roads or travelling, not only in horse roads, but where the men convey their tubs by hand ?—Yes.

24063. Have you known any accidents arising on those roads ?—There is one accident reported, I believe, in 1905 or 1906, illustrative of that, where the man was tramming his tub, and the roadway was so low he could not look up, and he ran into the man in front of him. Supposing there were two or three like that following one another, and the first man's tub gets off the road, or becomes stopped, then I do think the road should be of sufficient width to allow him to get out of the way, and prevent his being crushed.

24064. That is a fairly common cause of accident where tramming is done in that way ?—Yes.

24065. Or even where horse haulage is done, you think the roads should be that width ?—Yes.

24066. I suppose the only place for the pony driver is between the pony and the tram ?—Yes : but although that is the natural place, owing to the state of the roads being rough, with coals falling off the trams, it becomes a very dangerous place for the lad to walk between the shafts or the limmers—as we call them in Derbyshire—and the tub.

24067. And very often he has not room to walk in any other place but in the middle of the roadway ?—Yes.

24068. Now the trailer which you speak of, being attached to the last tub, or train of tubs going up a hill, would not be suitable while that train of tubs was going down the hill ?—No.

24069. Consequently some other appliance would require to be fixed to the tubs in going down a steep incline in order that if a breakage of a coupling or draw-bar took place part of the train might not run away ?—Yes.

24070. Do you know of anything which would tend to prevent that ?—Yes. In our collieries in some cases they put two clips on, one behind the run and the other in front ; but where there is a steep gradient they have lashing chains, which, being of iron, thrown over the top of the trams from the commencement to the end, if there is a break the tub lifts up and gets off the road, and so it prevents any running away.

24071. You would not care whether that lashing chain was under or over the two tubs so long as it attached the whole train together ?—Quite so.

24072. With regard to gates on cages, have you known of men jumping off or jumping into a cage when it is just going away from the bottom ?—I have not known them jump, but I have experience of one case, because I once had the necessity myself of jumping off.

24073. If there were the gates which you speak of, then when the cage was loaded up with men those gates would be shut, and no person could attempt to jump on the cage when going away ?—That is so.

24074. You think it would tend to greater safety ?—Yes.

24075. (*Dr. Haldane.*) If the gate had been there you could not have jumped in the case you refer to ?—No.

24076. Was it necessary for your safety to jump off ?—Yes, at that time it was necessary, and the reason was this : it was a small colliery with only one cage, and I got on at the surface to go down, and instead of the man lowering me down he took me up. At that time and at that colliery there was no detaching hook attached, and no provision made for preventing over-winding, and the result was I jumped off the cage, and the cage went simply over the wheel.

24077. (*Mr. Smillie.*) If the gate had been on there you would have been over the wheel as well ?—Yes.

24078. There is a danger either way ?—Yes, there is a danger either way ; but I believe a gate, considering the speed of raising and lowering at modern collieries, would prevent accidents, although I admit we have not many accidents of that nature to-day.

24079. (*Dr. Haldane.*) You would have also to consider the possibility of the cage going down into the sump, I suppose, at the other end ?—No, it cannot go into the sump, for the simple reason that there are strong baulks put across to prevent it. It lands on the solid bottom.

24080. Or going violently against the baulks ?—Yes.

24081. (*Mr. Smillie.*) Those baulks close when the cage has gone up ?—Yes, there is a provision of that sort made to prevent people at the pit top falling down the shaft when the cage is running. At the present time at the end of the cage when men are being raised or lowered there is simply a bar on each side of the cage, and a chain.

24082. I am now dealing with the method of preventing the cage going down the shaft. You propose having two props close to the bottom of the cage, so that the cage would be set back ?—Yes.

24083. And those would automatically allow the cage to go up, and then close, and prevent the cage going back ?—Yes.

24084. We call them shuts, but you call them props. There would not be much expense in having those fixed at any colliery ?—No : we have them at work to-day at one of the largest collieries in the Derbyshire Miners' Association—that is, the Warsop Main Colliery, of the Staveley Company.

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24085. (*Mr. Ratcliffe Ellis.*) The accident that happened to you when you had to jump out would not have been prevented by any arrangement that I can see, because it is the case of a man starting the engine the wrong way, and it is not the case of a cage coming up and not stopping in time ?—That is so.

24086. That could be prevented by an automatic arrangement ?—Yes, an automatic arrangement attached to the engine.

24087. It would not have helped you in your case ?—No.

24088. (*Mr. Smillie.*) With regard to fast winding, is it not the case that sometimes in lowering men they may be dropped 30 or 40 feet, almost as if the rope had not hold of them at all ?—Yes, it seems to have that effect when you are starting from the top.

24089. Does it not very seriously affect ultimately the nervous system of the workman ?—Yes.

24090. And the men are strongly opposed to being dealt with in that way ?—Yes.

24091. Have you yourself on some occasions felt almost as if the rope had broken ?—Yes, I have thought we were off to heaven.

24092. Do you really mean by your evidence that in addition to regulating the number of men to be on one deck so that there would be sufficient comfortable space for them, you would also prevent a large number of men being on the cage at the same time ?—Yes, and for this reason ; if we are to look forward to a curtailment of hours, then we may have a great increase in the number of men being lowered, and greater anxiety to get the men down and also getting them out. I do think that a legal limit ought to be made to the number of men to be in any one shaft at once. In our colliery it continually takes place in the morning that when one shaft is being drawn in and the other taken out, there are 36 men in the shaft at once. I do think that is quite plenty in a shaft at any one time.

24093. Are you aware that there may be shafts in which 72 men may be in it at one time descending, and 72 ascending ?—I am not aware of that.

24094. If, at the passing-way, the cages came in contact, a disaster perhaps quite as serious as an explosion might take place ?—Yes

24095. And on those grounds you would prefer to limit the number of men to be in the shaft at one time ?—Yes, or the cage.

24096. The enginedriver being human, some serious accidents might take place which would cause disaster ? —Quite so.

24097. Are you in favour of deputies and firemen holding a certificate of competency ?—Yes, I think they should all pass an examination, and be able to secure a certificate of competency.

24098. So far as the safety of the workmen is concerned, do you think they are the most important men in the colliery ?—Yes, I do, because they are continually coming in contact with the new conditions that open up at the varying workings of the coal face.

24099. Have you any experience of what is called stoop and room work ?—No.

24100. Your experience is longwall ?—Yes, longwall.

24101. Can you tell us the reason why the deputies insist upon taking out all the timber although they know it will be lost, or that some of it will be lost ? Is it in order to get the roof down ?—No. I believe the instruction is received from the manager that all timber must be drawn ; and when they know from their own experience that it is impossible to recover the timber they say it must be taken from under the roof, and therefore placed out of sight of the manager.

24102. You say that process is dangerous ?—Yes.

24103. Is it the person who takes it out who runs the risk, or the person instructing him ?—The person that takes it out is running the risk.

24104. And another man instructs the stallman that he must take out that timber, although he recognises there is considerable danger in taking it out ?—He knows in his own mind it is impossible to recover it.

24105. And there is great danger in taking it out ? —Yes.

24106. Your evidence is that the stallman being an experienced man at the face should have a voice in saying whether certain props should be drawn or not ?—Yes.

24107. What would be the result if the stallman refused to obey orders and refused to take out the props which he believed to be dangerous ?—Well, in most cases he would have to submit to a fine for leaving them up.

24108. And disobeying orders ?—Yes.

24109. (*Chairman.*) What sort of certificate do you suggest the fireman should have ? Do you suggest he should have the present second-class certificate, the same as you have ?—Well, I think it would be a very good thing ; but it is perhaps not necessary to go quite so far as a second-class certificate with a deputy ; still I think it should be such a certificate as would require a real practical man to pass an examination to secure it.

24110. You suggest there should be a special fireman's examination, and not the present second-class certificate examination ?—Yes.

24111. (*Mr. Ratcliffe Ellis.*) You would consider that the man who had the present second-class certificate would be qualified ?—Yes.

24112. (*Mr. Smillie.*) Providing he had the practical experience ?—Well, I presume he would have the practical experience before he secured it.

24113. (*Dr. Haldane.*) Whom do you think should be responsible for seeing that the timbering of the roads is carried out ?—I think that the instructions ought to be given, and the maximum fixed by the inspector, and then the responsibility falls on the management to see that it is carried out.

24114. Can you tell me what exactly are the responsibilities of the deputies with regard to timbering ? Do they see that the face is timbered in accordance with the rules existing in the colliery ?—Yes, that is their duty ; and also if they see that the systematic rule which is laid down does not apply, then to give instructions for timber to be set which will secure the roof.

24115. You think they should be immediately responsible for the timbering of the roads ?—Yes, under the manager.

24116. The deputies are at present responsible for the safety of these roads, are they not ?—Yes.

24117. You think they do not set sufficient timber just now ?—I do.

24118. You think they are two economical with the timber ?—That is it.

24119. Can you tell me whether a deputy is ever paid a lower wage than a hewer at the face, in your district ?—Yes, I have no doubt they are, especially the contractors —the contracting coal-getters.

24120. Do you think the wages of a deputy are sufficient considering the responsibility placed upon him ? I will put it in this way : do you think that the wages of the deputies are sufficient to attract the most capable men to the post ?—I do not.

24121. Do you think it would be conducive to safety if they were paid higher wages than they are at present ?— Yes. I believe it possible in many cases for a man contract coal-getting, or what we call a stallman, to get better wages than the deputy is paid by the day. Of course, if a contractor, he has a certain amount of risk to run whether he gets the money or not.

24122. (*Mr. Enoch Edwards.*) What would the fireman's wages be, do you think ?—I think the head deputy's is 7s. 6d. a shift now.

24123. (*Mr. F. L. Davis.*) Does that mean six shifts a week ?—Yes.

24124. (*Mr. Enoch Edwards.*) That would be something like what a day wage amounts to now ?—It is about the same as our day wage now.

24125. (*Dr. Haldane.*) There is nothing extra ?—No.

24126. There is no inducement to a properly qualified man to apply for the post of fireman ?—That is so. There is just this in it—he has practically a standing wage, but at our hard coal collieries with the times we are having now, that does not make so much difference.

24127. (*Mr. Ratcliffe Ellis.*) At other times it would make a difference ?—Not at our collieries, but at several of the collieries I have no doubt it would.

24128. In Derbyshire in the summer time the housecoal collieries are working sometimes only two or three days a week ?—That is so.

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Mr. Walter Marriott.

26 June 1907

24129. (*Mr. Smillie.*) Is the deputy or fireman working most of the time?—In some cases I do not think the deputy goes when the colliery is standing.

24130. (*Dr. Haldane.*) Have you ever considered the question whether it is desirable to provide at the pithead means for washing and changing cloths?—Yes, it is a very necessary thing, and to prove that I believe in that, I for over two years took a dry pair of trousers and singlet and flannel belt to change when I have done, and for over eight years I have taken a dry singlet and belt to put on when I have done my work. I believe those provisions should be made.

24131. Where did you leave those things?—I took them into the stall.

24132. You put the clean ones on when you started to go home?—Yes.

24133. Still, you could not, of course, wash yourself, but you just put them on anyhow?—Yes.

24134. Does it cause much inconvenience at home for a man to come into the house all dirty and covered with coaldust?—Yes, many of our colliers' houses are very small, and it does cause great inconvenience, as there is no provision made for a man to have a complete bath.

24135. It is very inconvenient in every way for them to come home black and dirty, I suppose?—Yes.

24136. Are you acquainted in any way with the provisions which are made in many mines for washing at the surface and the changing of clothes?—No.

24137. You have not considered how it could best be done in England?—Yes, I believe myself that there might be baths and wash-houses provided at the collieries for the men, and also places for their clothes to be dried which there is at the present time in sinking—for instance, where the work is very wet, the company will provide a cabin on the bank and a place for the men to have their clothes dried.

24138. That is a small thing, and will only hold a few men?—Yes, that is so.

24139. Are these men employed in sinking often Cornish men?—No, coal-pit sinkers.

24140. Are you aware in metalliferous mines that it is the general custom to supply what they call a place for washing and drying?—I believe that is so.

24141. I thought these men employed in sinking were accustomed to that sort of thing?—No, the men sinking our coal-pits I am speaking about.

24142. They are not colliers at all; they are specially employed in sinking?—No, not altogether; some of them are, but they follow occupations besides sinking; many of them, when they have sunk a colliery and get to the coal, find that the colliery expect them to receive some of the great benefits from it, and they stop at it.

24143. Do you know in your district any cases where a miner's family is in a one-roomed house?—No.

24144. You have never heard of such a thing in your district?—No.

24145. (*Chairman.*) Is there anything else you would like to say?—No.

Mr. William Sewell, called and examined.

Mr. William Sewell.

24146. (*Chairman.*) I understand that it is the wish of the Derbyshire Miners' Association that you should give evidence before us?—That is so.

24147. You belong to the same Association as the last witness?—That is so.

24148. Where are you employed?—At Holbrook, J. and G. Wells, Ltd., Eckington Collieries.

24149. Have you worked there always?—No: I have been there something like 36 years.

24150. You have been a stallman for 34 years?—Yes.

24151. At the same mine?—Not exactly the same mine, but the same Company.

24152-4. You have always worked under the same Company?—Yes.

24155. What other experience have you, except under that Company, of practical mining?—I have worked at other collieries besides. I did not have such a great deal of practical mining, because I maintain you do not get practical knowledge until 21 years of age.

24156. Since 21 years of age you have worked under this company?—Yes.

24157. You are still working now?—Yes.

24158. At the coal face?—Yes.

24159. We know you are a stallman. How big is your stall? How many men are working in your stall?—We vary at our collieries in stalls. Sometimes we have a longer stall and a larger number of men, and sometimes we have a shorter stall and a smaller number of men.

24160. How many stallmen are engaged in looking after the timbering?—Chiefly three. That is a rule in our particular colliery.

24161. (*Mr. Ratcliffe Ellis.*) In what distance?—The distance of the stalls.

24162. Yes; what is the distance?—They vary: perhaps 40 yards.

24163. There is a stallman in each stall?—Yes. 40 or 50 yards, and sometimes a little less.

24164. One of these men looks after the timbering?—Every man is responsible. Each stallman is supposed to take his share of responsibility and take any corner he is asked to take.

24165. (*Chairman.*) Has your stallman any particular responsibility with regard to drawing or putting up timber?—Every stallman is supposed to either set timber or withdraw it.

24166. Every man working in the mine?—No, every responsible stallman

24167. There are three responsible stallmen in every stall?—Not in every stall: they vary according to distance, and how it is worked, whether night or day.

24168. How many men would be working under the three stallmen at the same stall?—They vary; sometimes more and sometimes less.

24169. Ten or a dozen?—We do not work so much on that long butty system. We work two stallmen or three day-men, or three stallmen and two day-men, just as circumstances permit.

24170. The stallmen are responsible for putting up and drawing the timber so as to prevent accidents?—That is so.

24171-2. I understand that you wish to point out the danger of working more than one seam in a shaft?—Yes. As far as our county is concerned, the men seem to have more fear now of riding up and down than they have of working at the coal face. We must admit when we see the large amount of coal that is drawn now and the small number of accidents, that it is remarkable, when you come to look at it in that light, but we think they might be brought down to a minimum. We think in the near future that we shall have a big disaster; we have such fast running and big loads and more than one seam worked in a shaft.

24173. Take the last first. With regard to more than one seam worked in a shaft, what are the dangers you are afraid of?—I have a plan which I could illustrate to anyone. Why we have objections to more than one seam in one shaft is having men drawn out of various seams at one time.

24174. (*Mr. Enoch Edwards.*) You would not object to 10 seams if all brought to one level?—That is my point. We have had a serious shaft accident in our district—I am bordering on the Derbyshire line—at Orgreave, where we had three men killed and one seriously injured through having more than one seam in one shaft.

24175. (Mr. *Ratcliffe Ellis.*) When?—That was four months ago.

24176. This year?—Yes.

24177. (*Chairman.*) How did the accident occur?—They work the Silkstone and the Parkgate in one shaft. The Silkstone is 90 yards below the Parkgate. It is usual to let men down to stop at either of those places, either ascending or descending. On this particular day there was one man ascending to the Parkgate from the surface, which was 90 yards off the Silkstone bottom. He gets on at the top, two more men get on at the Silkstone at the bottom to ascend. When the engineman receives the signals he goes on to the Parkgate and collects two more men. That means that there are four men hanging in

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the shaft 90 yards off the bottom, and one hanging 90 yards from the top. He gets his signal to go on again, and the engineman goes on while he gets his descending man to the Parkgate. He leaves that man there, and his four men in the shaft 90 yards off the top. When he receives the signal to go on he goes on, and the consequence is men are into the pulleys in a twinkling of an eye: from loss of memory, through some cause which I am not prepared to explain, in half a second he knocks their skulls in and permanently injures others. We say if there had been one shaft in one seam he would have started from the bottom and gone to the top with his load in a successful manner. That is one reason why we object to more than one seam to one shaft. We think it could be worked by bringing it to one particular level. In our collieries we have three seams in one shaft. There is such a complication of signals it is an easy thing for an engineman to forget. You are forced to have one on-setter to look after these three shafts They do not draw coal out of these three seams in this shaft, but they take the men up and down.

24178. (*Mr. Enoch Edwards.*) Where do they get the coal?—The coal is drawn out of either shaft. They have a drawing shaft for the Parkgate, and they draw Flockton and Silkstone from this particular shaft where they raise and lower the men. They have two shafts: one is down to the Parkgate only, the other down to the Silkstone 90 yards below the Parkgate, and then there is the Flockton three seams in one shaft to draw men out. The Parkgate coal goes to that particular shaft where the bottom is permanent, but the men have to be drawn out of the Silkstone shaft; that means three lots of men drawn out.

24179. (*Mr. Ratcliffe Ellis.*) Which is the bottom of all, the Parkgate or the Silkstone?—The Silkstone, above the Parkgate.

24180. What depth is that from the surface?—I think about 290 yards.

24181. Next to it coming up is the Parkgate?—Yes.

24182. What is the distance?—90 yards between the two.

24183. Is there another seam?—Yes: I believe that is 120 yards from the surface.

24184. What is the name of that?—The Flockton.

24185. In this pit they do not wind any coal at all?—Yes, out of Silkstone and Flockton.

24186. They wind coal from these mouthings?—Yes, but there is a permanent bottom to the Silkstone.

24187. Where do they wind Parkgate?—Another drawing shaft some distance away.

24188. The Silkstone and other seams are wound where you are speaking about?—Yes.

24189. Your objection is to winding men from two or three mouths?—Yes.

24190. (*Mr. F. L. Davis.*) It is rather confusing: it is not the number of seams worked, but the number of levels worked you object to?—The number of mouthings.

24191. For handling men?—Yes.

24192. (*Mr. Ratcliffe Ellis.*) How would you alter it in that particular pit? Where would you wind the men?—I should have them brought to the one level.

24193. How?—By drifting down to it.

24194. It is 90 yards?—It is done at some places. It is not a question of cost: it could be done. It is not a question of cost with me: it is a question of safety.

24195. You can drive a down brow?—I should have drift to down to one, and up to the other.

24196. That is an incline. Instead of a perpendicular shaft you would have to have an incline?—Yes.

24197. What would the inclination be?—I have not worked that out. It is not my practical experience to work that out.

24198. That is the alternative?—Yes. The gradient can be got. It is very steep. They are drifting down to one particular seam now which is very steep.

24199. Would there not be very much danger in a steep gradient?—No: the further the distance the gradient would not be so steep.

24200. You have no idea of cost?—No. Cost has nothing to do with me: it is a question of safety.

24201. Not even if it was so much that you would have to stop working these mines altogether?—I do not think the employers from their side study the cost. They are willing to co-operate with the miners' leaders for safety at the present time. That is my opinion. I know a colliery in Derbyshire which works upon that principle. I have been there to make an examination, and they have drifted down. They take a longish distance and the gradient is not so steep.

24202. The object is to prevent an accident such as you have described?—Yes.

24203. That arose from a momentary loss of memory?—Of the engine man. Had he not had those two shafts to collect from and to collect and deliver men, he would not have made the mistake.

24204. If it was a loss of memory the mischief might happen whatever you have?—Yes, but I am not going to say that he would have lost his memory if he started from the bottom. It looks very dangerous when he has to start 90 yards from the bottom and stop three times on the journey. We say that it is a dangerous experiment.

24205. (*Mr. F. L. Davis.*) Is that the only case of an accident in that mine?—It is all I know of of that particular character. There was also the Shirebrook disaster which caused men in our county to feel very much about riding up and down the shafts.

24206. (*Mr. Smillie.*) An engine winder will have three different bells?—Yes, three different signals. If he had to go from the bottom to the top he would ring seven to the engineman to ascend to a certain seam of coal: then he would have to give three other signals that a man is ascending. Then he would have to ring off: then he gets to his particular coal mouth, and he has to give other signals for the work to be performed, either running on coal or sending men out.

24207. (*Mr. Enoch Edwards.*) Have you had any experience of men falling down from those insets?—We have had no one fall down, but there comes another danger which I shall be able to explain.

24208. (*Chairman.*) That is all you want to say about the seam. Then you say it is dangerous to allow men to get on the swinging cages?—That is to say, at these mouthings. You are compelled to have your cage a certain distance off the side, and when men have to get on that cage you are entirely in the engineman's hands. He has to hold you by his brake, or some other process. We say, when we get on that cage and the steam brake, or whatever he holds us with, goes wrong, it would dash us down into the bottom. We cannot have props in, because it would be such a danger to have props for the cage to drop on. If the props were left in and the cage caught them, you know what the result would be, if there were men on the cage.

24209. (*Mr. Wm. Abraham.*) What is there to help the man stepping from the mouth on to the cage?—At this particular shaft, about 15 inches from the mouth to the cage, there is a kind of board about 8 inches broad, dropped down for them to step on to. It is held by a chain. The Company do all they can to prevent anyone falling down. I have no charge to make against them whatever.

24210. It is not a question of charging. We want to know the system?—The system is dropping a board down about 8 inches.

24211. (*Mr. Ratcliffe Ellis.*) There is a guide on the shaft?—Yes, the conductors, but that does not stop the swinging cage.

24212. The guides are swinging, too?—I am not prepared to say they are not.

24213. If they are not swinging, the cage is not?—They are supposed to be tight. If they get a little slack they might swing. I know a case a little while ago where the rods got slack, and by the men getting off at that particular station it twisted the cage, and when the engineman had to start his engine his chains and the rope dropped on top of his cage. He shoves his steam brake on to catch the cage, but as soon as he does that the cage drops. Had there been men on it it would have broken their legs or thrown them off, unless there was something across to stop them.

24214. (*Mr. F. L. Davis.*) With all this danger, I think you said just now that there has never been a case of a man falling down?—I have never known one.

(*Mr. Enoch Edwards.*) They have fallen nevertheless, to my knowledge.

(*Mr. F. L. Davis.*) In that particular pit?

(*Mr. Enoch Edwards.*) In the system.

(*Chairman.*) How do you propose to remedy that?

24215. (*Mr. Ratcliffe Ellis.*) Bring them on to one level?—Yes: one level is the remedy. I may illustrate this as it is in a colliery I know. There may be a lot more in operation. I know a good many working on the system I have suggested. I am making no charge of any neglect against any particular man.

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Mr. William Sewell.

26 June 1907

24216. (*Mr. Wm. Abraham.*) How is the coal put on the cage?—On this cage here there is a door they drop down, which drops it on to the cage and runs the trams on, and it is worked by a weight and pulley, and when he has done sending coal out of that particular shaft he pulls his door up, and has a clear run for the cage.

24217. The cage is hanging in the shaft all that time?—All the time they are running coal on.

24218. (*Mr. Ratcliffe Ellis.*) Your danger is stepping on and off the cage at the mouthings?—Not altogether: it is the swinging of the cage.

24219. You do not mean when the cage is swinging at the mouth: it is the danger of getting in when it is not steady?—I do not mean that the only danger is getting on, but you are swinging, and there is nothing to prevent you falling if the engineman lowers the cage

24220. It is getting on and off the cage at these points where the danger is?—Yes.

24221. When once in the cage you are all right?—Yes, without the engineman lets you go before he gets his signal, or unless his steam brake was to let you go.

24222. A man winding the wrong way at the top?—He has to hold us by a brake, and if his brake did not work we should have to go against his will or his wish.

24223. (*Chairman.*) You want to tell us something about the danger of lowering a large number of men down the pit at the time?—We think the time has come when there should be some limit put on large numbers of men riding up and down the shaft at the time.

24224. That not more than a certain number of men ought to ride up and down the shaft?—We think that it should be a question for the inspector, and that he should have some power over that. Now the manager puts a board up, and says 20 men must ascend and descend this shaft at once, and we are compelled to comply with his orders. I can remember, in my own experience, when we did not have more than four, but I do not want to go back to that time. We think some limit should be put on what numbers should ascend and descend a shaft at one time. We are afraid in the near future that we shall have such a disaster that it will be as bad as a ship going down.

24225. Do you mean that the cages ought not to accommodate more than a certain number of people?—We believe that more than a certain number of people should not be allowed to ascend and descend at one time.

24226. In a cage?—Yes.

24227. Do you mean that they ought to be built not to accommodate more than 10 or 12 people?—I do not care how large you build them as long as you restrict the number.

24228. As long as you restrict more than a certain number of men coming up or going down at one time?—Yes.

24229. Why do you consider that would conduce to safety? What is the objection to having a cage holding 16 men?—Because we think there will be a great loss of life.

24230. If there was an accident, 16 men would be killed?—Yes. We think it would be sufficient if you had a certain number fixed. I am not going to place the number. It is a serious thing to have 40 men on the cage and all be dashed down at once. It is, of course, a serious thing if you only have one

24231. Do you think that 16 or 18 should be about the largest capacity of one cage?—I believe there are some many more than that. They load more than one deck.

24232. They have two decks?—Two or three decks.

24233. So that there are as many as 40 or 50 in the same cage?—In our particular colliery we lower 18 down at the time. There are collieries not far off where they let 24 down at a time, and I have heard it said that there are places where there are 40 who go up and down at a time, but whether that is so I do not know.

24234. There may be as many as 40?—Yes, and we think that it is getting too large a number when we see the deep mines and the fast running which we have.

24235. Would you prevent more than a certain number being carried up at one time, or only have so many men to work in the seam served by the same shaft?—We do not wish to interfere with the seams at all: it is the riding up and down.

24236. The men working the seams must be brought up and down somehow. Do you suggest that here should be a limitation of the numbers of men who could work in a seam served by the same shaft?—We do not wish to put a limitation on the working: we wish to put a limitation on the number going up and down.

24237. When you are working you must ascend and descend. I want to know what you mean?—It would only add a little on the time.

24238. (*Mr. Ratcliffe Ellis.*) You want to limit the hours the men may be down and at the same time let them take longer to go down?—No, I am not discussing that.

24239. I thought the two had some relation?—I am not dealing with that.

(*Chairman.*) I do not understand what you mean.

(*Mr. Ratcliffe Ellis.*) You must take a longer time to bring the men up and down that you do now?

24240. (*Chairman.*) You would not interfere with the number of men that might be working all together in the same seam?—No.

24241. But you would say that not more than 10 or 12, or some specified number, should be taken up at one time?—Yes.

24242. Directly you have taken up one lot you would take up another lot, all through the day?—Yes.

24243. (*Mr. Smillie.*) In a colliery employing 500 men, if you limited the number to eight on the cage, would it make more than 15 minutes' difference in getting them down?—I do not think it would take much longer to get them down.

(*Mr. Ratcliffe Ellis.*) The Departmental Committee said it took an average of an hour taking the men up and down. It would take two hours probably if your suggestion were adopted.

(*Mr. Smillie.*) Two minutes will run from the surface to the bottom in any pit I know. If, instead of running 20 men on the cage, you limit the number to 10, it will double the time it will take practically to put down 500 men.

(*Mr. Ratcliffe Ellis.*) If it takes one hour, on an average, for both journeys, it would double it.

(*Mr. Smillie.*) If an accident does take place, those men want to limit that accident to eight or ten.

(*The Witness.*) We do not say at the present time that it shall be eight or ten. It might be 20, but we do not want to go further. We are rather afraid that we might increase to 40 or 50.

24244. (*Mr. Ratcliffe Ellis.*) The statistics show that travelling up and down a shaft is about the safest part of working in mines?—Yes.

24245. Do you agree with that?—Yes.

24246. You say you want to provide in case there should be an accident in the shaft, that there shall be as few men as possible in it?—Yes.

24247. Why not also provide that in the most dangerous part of mining, namely, in the seam itself, that there should be a limit to the number employed for the same reason? Our accidents are to a good many individuals. We do not get many explosions. That would be only in the case of an explosion.

24248. Are there not far more accidents from explosions than even in the pits?—I do not think there are.

24249. You must look at the statistics. What reason is there for reducing the number of people in a shaft in order to prevent excessive loss of life or injury in the case of a winding accident, which is very seldom indeed, if you do not at the same time propose to reduce the number of people employed in the mine where an accident is more likely to arise, in order to secure the same result?—We are rather afraid we are increasing in speed when lowering men up and down.

24250. You do not answer my question?—I am not prepared to say that we will restrict the number of men working in the mine.

24251. Why not, except one is a good deal safer than another. You propose to restrict the number of men at the safest part and leave it unlimited at the part which is dangerous?—My point is this: I would rather have to look after myself when I am at work and have a chance of taking care of myself, but I have not that chance when I am in the shaft. I would rather work at the coal face than ride up and down the shaft.

24252. The effect of this would be, if there is a limit to the hours during which men may be down, and it takes twice the time to get in and out, it would reduce the time available for coal getting. Would that not be the result?—It would take longer time.

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24253. Whatever time you did take off would still lessen the time to get coal, and lessen the output of coal ?—It is not a question of the output of coal, it is a question of safety.

24254. You think it is only necessary to limit the number in the shaft ?—Yes, I do not say whether it should be 8, 10 or 20. I think that should be left to someone else to say.

24255. Do you say that the inspector should prescribe the number ?—To a large extent. I think he should be a high authority in that particular case.

24256. Should he have the last word or not ?—I do not know. I think there ought to be a board.

24257. What sort of a board ?—County board, or someone to consult.

24258. Who is to be on the board ?—I do not know whether I should not have the miners' leaders on, and have a county board.

24259. For what purpose ?—To let them have a bit of practical experience along with the inspectors' experience.

24260. Supposing they do not agree, what is to happen ? —I think they would agree.

24261. Yes, but supposing they did not ?—They would have to have someone to appeal to.

24262. Whom do you suppose ?—I am not prepared to suggest whom they should appeal to; they would have to appeal to Cæsar, or someone.

24263. Who is to be Cæsar ?—I am hardly prepared to suggest, but there is a way out of that difficulty.

24264. Is this to apply only to the number of people to be wound up and down the shaft at the time, or to the general management of the colliery ?—I should have it apply to the number going up and down the shaft.

24265. Solely to that ?—Yes.

24266. Do you know at the present time if the inspector is of opinion that there is any dangerous practice upon the mine he can require the coal-owner to go to arbitration as to whether it shall be continued or not ?—The inspector has not power to say now how many men should ride up and down.

24267. He has not the power, but he has a right, if he considers there is a dangerous practice, to require the coal-owner to arbitrate ?—Yes

24268. What more do you want than that ?—We want the numbers fixed. We are rather afraid that we are going to get to bigger numbers.

24269. It is Section 42 of the Act. At the present time if the inspector is of opinion that there is any dangerous practice—if he thought they were winding too many men in the shaft—he could require it to be altered. If the coal-owner did not agree, then he could go to arbitration, and the higher authority (Cæsar, you call him) would decide whether there should be that number in the shaft or less. Do you want to alter that ?—There is nothing besides the inspector at the present time.

24270. Do you want anything more than that ?—We want the numbers limited. When we have a case in dispute——

24271. We have got to this point: you say whether it is discussed by the men or the inspectors or the employers, that there must be a Cæsar to decide at the end. At the present time you can have Cæsar to decide, because the inspector can give notice under the Act of Parliament, and if the coal-owner will not comply with his requirements he can go to arbitration and the arbitrator will decide what it is to be. He will be your Cæsar ?—But this is my point: we have been lowering 20 men down our colliery and the manager wants to get 10 more down to make 30 at a time, but we think, from the men's side, that it is too many, and that it is too dangerous. We are not experts, but we say we do not think that ought to be done; but whom are we to appeal to at the present time—only the inspector.

24272. Yes, but the inspector, if he agrees with you—you may not always be right—can give the coal-owner notice at present under Section 42 of the Coal Mines Regulation Act where there is any dangerous practice.

(*Mr. Smillie.*) No; that is not a dangerous practice.

(*Mr. F. L. Davis.*) The Witness says it is.

(*Witness.*) It is not according to your own showing. It is according to my showing, but it is not according to your showing.

24273. (*Mr. Ratcliffe Ellis.*) You say it is ?—And you say it is not.

24274. If the inspector considers it a dangerous practice it is his duty to give notice to the coal-owner and require him to stop it.

(*Mr. Smillie.*) To stop winding ?

24275. (*Mr. Ratcliffe Ellis.*) To stop winding the number they say is dangerous, and if not, the inspector can go to arbitration, and whatever the arbitrator decides is the law. What more do you want than that ?—We want power to appeal.

24276. Do you want the power to say what it is to be ?—No.

24277. Why are you not satisfied with the present arrangement ?—We do not wish to have the power to take the sole control out of the managers' hands.

24278. Why are you not satisfied with the present arrangement which enables the inspector—— ?—We are afraid the numbers are going to increase.

24279. You do not answer my question: why are you not satisfied with the present arrangement which enables the inspector to do exactly what you want to do ?—No, he perhaps will not do what we want him to do.

24280. He is entitled to do it ?—We think if the numbers were fixed——

24281. Very well, I cannot get any further than that. However, that is your view. Do you use lamps in your colliery ?—Yes; but before you leave that particular question I would like to have another word on the cage business. There is another dangerous practice about winding men up and down the shafts. Where you have two or three decks, we think the men ought to be loaded at one time. At the present moment at some collieries they do that. You have a false bottom. You are loading coal at some place on three decks or two. You are loading men on both at once. At some collieries you do not. You load the top deck if men are ascending the colliery. The engine-man has to raise you up, and then you are loading your bottom deck; the same coming out, descending. We think the men ought to be all loaded at one time. This is not an expensive piece of business. We think the men ought to be able to get on three decks at one time, and go on the journey without signalling for raising or lowering. We think it ought not to be allowed.

24282. Is that all you wish to say on the shaft ? Inasmuch as there are cases where they put all the tubs in at one time, there might be arrangements made so that they put the men in ?—Yes, where they do not put all the tubs on at one time. We say it ought to be arranged that the men could be all put on at one time, even if they cannot put the coal on.

24283. It would save time ?—Yes. That would be another way of helping. One question will help the other a little.

24284. Is there anything else you wish to say ?—I do not know whether my colleague has explained this, but we think there ought to be some catches when there is an overwinding case. That is in operation at some collieries. I have been there when we have had men's legs broken when there has been overwinding. In these particular cages the springs have acted each time, and if it is not on the cage it breaks the men's legs.

24285. Have you had experience with Bertram's patents? —No; I am speaking of practical experience.

24286. There is a contrivance which stops the engines if the speed is not increased at a certain point in the pit ?—I am speaking of overwinding.

24287. I am talking of preventing overwinding ?—Anything that will prevent it, I agree with. Where it is brought up it is a danger.

24288. It is in existence ?—We say if the springs fail to act in an overwinding case, the cage would have to drop to the pit top on the props. We think it would be a benefit if there could be some springs which would not be interfered with going up and only acting when coming down. It would only act in overwinding. That is in operation at some large collieries. These things can be brought about, and it will be a great saving. It is not only the men killed, it is the men lamed.

24289. (*Mr. Enoch Edwards.*) They have these arrangements at many collieries, and you would make them compulsory ?—Yes.

24290. (*Mr. Ratcliffe Ellis.*) I do not know whether he would say that; this may not be the best thing. I agree that anything to prevent the effects of overwinding should be used, but whether that is the best way is the question ?—Yes.

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Mr. William Sewell.

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(*Mr. Enoch Edwards.*) The Witness says that the best should be adopted.

24291. (*Chairman.*) Have you anything more you wish to say?—I have nothing more on the shaft accidents without someone has some questions to ask me which I will answer so far as I can.

24292. Is that all that you want to say about accidents in general?—No; only I shall be prepared to answer any practical question so far as I can.

24293. (*Mr. Wm. Abraham.*) With regard to your suggestion to minimise the dangers at the various staging of the shaft, you say that there should be an air drift driven from one seam to another?—That is so—a drift.

24294. I think you agree now with Mr. Ellis, that would be an expense?—Yes.

24295. A great deal of that expense would be saved, in your opinion, by the time that is now lost in waiting and winding from the various mouths of the shaft?—That is so.

24296. (*Mr. Ratcliffe Ellis.*) Would the men have to go down to the bottom or come up to the top mouthing?—Come up to the top mouthing—have a permanent landing.

24297. Would you get them down to the bottom of the pit. There is no permanent landing except at the bottom?—The cost would not be as great as you anticipate.

24298. Say there is the bottom of the shaft and two mouthings. You do not want to wind men from these mouthings at all?—No.

24299. You want to wind from the bottom?—Yes.

24300. You would land them all at the bottom to begin with?—No. If I was going to sink a shaft to three seams of coal——

24301. I am talking of the shafts there now?—I should not bring him to the bottom, I should bring him to the permanent landing.

24302. Where is it except at the bottom?—The stage has been made.

24303. Opposite the mouthing?—Yes.

24304. Why cannot you always do that?—You can make it permanent there.

24305. Why cannot you always do that?—I am not prepared to answer that.

24306. Is it the top mouthing where you make the permanent stage?—No, near the middle mouthing.

24307. You land the men there who are to work at the seams above and below?—Yes.

24308. They would have to travel up?—Yes, up and down the incline.

24309. The longer the incline the less the gradient, and the shorter the incline the more acute the gradient?—Yes.

24310. They would have to travel to get to the bottom?—No, they would be landed in the middle when they get off the shaft, but when out he would have to walk to his coal face just the same.

24311. Have you calculated what length of time the travelling would occupy?—No; it would not take a great deal of time.

24312. It would depend on the length. It would take more time to get to his work?—It would take very little more time.

24313. You cannot form an opinion of the length of time unless you have a plan before you?—If he was landed at the bottom, he would have to walk to his coal face just the same. It would make very little difference in the walking distance. You could not put a permanent landing across. I mean, I should put the permanent landing here which would be permanent and not be removed if I had a pit sunk. If I was going to sink a new pit I should go to my middle coal and drive out my coal. That is the point I should get at.

24314. (*Mr. Wm. Abraham.*) We have got so far, that the extra cost would be greatly minimised by the time saved in winding. That is your opinion when you get to the method of doing this?—Yes.

24315. You would have it done in order to minimise the danger to life and limb arising now from this present system of winding?—That is the object I have in view.

24316. Your idea is that the safety catches which have proved so useful in some collieries should be made compulsory at all?—Yes, as regards overwinding.

24317. Do you understand that the chief purpose of safety catches is to prevent overwinding?—It is to prevent the mischief after the overwinding. It would not prevent the overwinding, but it would prevent the cage dropping any distance after the overwinding.

24318. There is something in your evidence with regard to stalls which I do not quite understand. You call a place in longwall working a stall?—Yes.

24319. You may have 10 or 12 men working in that face?—Yes.

24320. I think you said you may have three what you call stall-men. You call those men practical hewers, practical men who have the responsibility of seeing that that place is worked safely?—I call the men stall-men who sign on a colliery, and he is the man they set it for, a stall-man, a tram-man or a day man. A man signs the book as a competent stall-man, and the management send that man where they like.

24321. The other name of that man would be a practical hewer?—Yes.

24322. They would have a kind of labourer or helper working with them?—Yes.

24323. Each of these hewers are capable timberers?—Yes, they are supposed to be when they are signed on. They sign them on as hewers or stall-men. They are signed on as stall-men and they take the responsibility the same as any other stall-man.

24324. Are they responsible for the timbering of that stall?—That is so.

24325. Are they responsible for drawing out the timber?—That is so.

24326. Is there anybody supervising?—Only the deputy as he comes through. If he thinks the timber is not satisfactory he will tell the man to set more, or if they have a system, and the man is not carrying out that system, he will report him.

24327. What do the deputies do generally?—They have various districts in various collieries. In some collieries the deputy will have a bigger district than others. In some large collieries he will have a big district to examine once during his shift. He may have another responsible man under him who will go round the next time and fire shots.

(*Chairman*) We are going to have two deputies here after lunch who will explain the system.

(*Mr. Wm. Abraham.*) Very well.

24328. (*Mr. Smillie.*) That is a different county?—Different counties have different systems.

(*Mr. Wm. Abraham.*) Are there any men coming to give us a general description?

24329. (*Chairman.*) They are coming from Northumberland and Durham?—The general working of the district is the longwall system.

(*Mr. Wm. Abraham.*) We are very interested in the question of timbering. We consider the question of timbering to be one of the most important questions, and I should like to know what is the general system of timbering, and who does it, and who is responsible for doing it.

24330. (*Mr. Enoch Edwards.*) The last witness covered all this?—A stall-man is responsible for setting all the timber and withdrawing it. He is responsible for his working face from the lip of his gate end right to the end of his stall.

24331. The deputy supervises whether he does his work properly or not?—That is exactly it.

24332. The deputy also examines the places for gas?—Yes.

24333. Or any other dangers?—Yes.

24334. Within your knowledge, are they able to do that to the satisfaction of the body of men?—I should say they are as a rule. I have had no complaints to make with regard to that.

24335. Have you had any complaint as to the size of the district they have to supervise?—No.

24336. Have you any complaints as to the hours they are working?—No.

24337. (*Mr. F. L. Davis.*) Is the pit which you are working in, which you have been describing with the different mouthings, typical of most of the mines in your district?—No there is a lot of them. There is one com-

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pany, I believe it is the Grasmore Company, which has some on exactly the same footing. There are some others of that character, but it is not the general average.

24338. Yet it is more exceptional than general to wind from two or three different levels ?—Yes, it is not the general thing.

24339. (*Mr. Enoch Edwards.*) Both you and your colleague have called attention to shaft accidents. You have had a rather serious one lately ?—Yes, we have had two rather serious accidents lately, one at Shirebrook and the other at Orgreave, which is close to where I come from —close to Sheffield—and lives were lost in both cases.

24340. I understood you to say you had not known any accidents by the men getting on the cage ?—No, not falling down the pit. I have only known the Orgreave accident where this two-mouth business is on, where an accident occurred as I have described.

24341. You have no cases 90 yards from the bottom where they make a permanent stop and work with a greater or lesser stop ?—There are some of that sort in Derbyshire.

24342. You get a permanent stop ?—Yes, and so regulated that it will stop at that place.

24343. There is no difficulty from a man's brake going off ?—No.

24344. He could not go over it ?—No, I do not recommend that, although it is safer than the other.

24345. There is more permanency about it ?—Yes.

24346. You are more permanently fixed and fenced round to obviate accidents ?—Yes.

24347. When you suggest that there should be a less number of men in the cage, have you fully considered what it means ?—It will mean longer going up and down.

24348. Your colleague's strong point was that they should go at a less speed ?—That is so.

24349. You refer to the fact that the mines are getting deeper ?—Yes, and the fast running.

24350. If you get deeper mines you want less speed and less people in ?—We shall be longer going down, but it is a question of safety with us.

24351. It is a question that has to be faced after all ?—Quite right ; it will take a longer time to do it ; there is no doubt about that.

24352. I understood you to say that there are places where there are 40 men ?—I understand that is so at Hickleton Main.

24353. There are some places where they work double shifts ?—Yes.

24354. Your people fear if an accident did happen —— ? —That it would be as bad as a ship going down.

24355. It would be a very serious accident ?—Yes.

24356. Mr. Ellis said to you why not limit the number of men in a pit if you do so in a shaft. That was hardly what you meant. If a rope broke there is no chance for a man in a shaft ?—No.

24357. If there is a cage coming up it is the same there ? —Yes.

24358. (*Dr. Haldane.*) With regard to your opinion that the number of men in the cage should be limited, I should like to understand your point of view. If a man has to go down a mine every day there is a certain risk, and it will be the same risk whether he goes in a cage with a great many people beside him or only with a few men ? —No.

24359. Each person will undergo the same risk ?—No, he has the risk, but still he has not such a large number.

24360. If there is an accident more men will be killed ? —That is so.

24361. If there are many in the shaft ?—Yes.

24362. There will be fewer accidents because the cage has to go down fewer times ?—That is so, but the engineman will not lose his control so much with a smaller load as he will with a big load. When he gets near the bottom with high speed engines and big loads on he has to use more care, and if he exhibits the least loss of memory you are into the bottom.

24363. I cannot understand that. It seems to me that will be as apt to happen with a small load as a big load ? —His load will not be so heavy against him.

24364. It makes very little difference to the weight of material in the cage. I should think he would have been less apt to make a mistake, because he is always accustomed to winding heavy cages of coal ?—I do not think so ; we who ride up and down every day know what we have to go through. We know when the big loads are on and the little ones. We know when the cage begins to be jerked from practical experience.

24365. That is a different question ; it may be desirable to limit the speed at which men are wound, but I do not see your point exactly in limiting the number of men in the cage. You would not propose to limit the number of men in a ship because of the danger of shipwreck ; you have referred to that ?—We suggest limiting the number.

24366. Would you put a limit to the size of liners going across the Atlantic ?—I am not dealing with liners on the Altantic : I am dealing with men in the cage.

24367. If a liner goes down there would be a fearful loss of life ?—Yes, and there will be a fearful loss of life here if a cage goes down with 40 men.

24368. In the case of a liner we all know it is safer to go in big ships. On the whole there will be fewer lives lost in the big ship ?—There is a difference between being on the ocean in a big ship and in a small boat. There is a great deal of difference between a cage going down a shaft and a liner going down at sea. There is the sea to knock about, but there is not in this particular instance.

24369. I am bound to say from my own experience of small cages and shafts, and so on, that I have always felt the risk was very much greater than in large ones ?—You have not had quite as much experience as I have riding up and down.

24370. I believe I have ridden in a greater variety ?—You may have, but yours were only casual visits.

24371. But I have made casual visits to a great many curious small shafts particularly ?—They will bestow a good deal of attention upon you perhaps.

24372. I am making no objection to your limiting the speed, but I do not see your point in limiting the number of men in the shaft. It seems to me it may be safer on the whole to wind carefully with a large number of men in the shaft than to wind fast, at the ordinary speed, with a small number on each journey ?—I am afraid you are looking at cost a little bit, and at the time it would take to lower the men down.

24373. That is the difficulty of your position, I think ? —I will take it you are all anxious to minimise accidents.

24374. Yes. Do you not think that a manager will take much greater care if he know that if there is an accident there will be perhaps 20 or 30 men killed ?—I am not prepared to say a disrespectful word against a manager. I believe a manager will exercise all that lies in his power.

24375. Do you not think that he will take extra care if he knows that an accident would be a very serious thing ? —I take it that managers are the same as miners, they are tempted to go over the mark : I am afraid they are.

24376. Taking it on an average, do you not think they would be more careful with large numbers of men in the shaft at a time ? Have you ever considered the desirability of providing arrangements for washing at the pit head ? —No.

24377. And changing clothes ?—No.

24378. You have not considered that yourself ?—No. Do you mean the German system ?

24379. Yes ?—No, we have not.

24380. Have you anything to say about the question of sanitation in mines ? Have you anything to say with regard to the provision of sanitary conveniences ? Do you think that there is any necessity for it ?—I do not think there is in our mines. Ours are well ventilated. There may be in some fiery mines. I have not considered it. There may be need to consider it in some deep, hot, fiery mines, but I think in our mines there is no necessity.

24381. There is no mess or nuisance down the pit ?—None whatever.

24382. Can the men use the goaf ?—Yes.

24383. So that in that way there is no trouble in your district ?—There is no trouble. Our seam unfortunately possesses a great deal of dirt.

24384. There is plenty of dust to bury it in ?—That nuisance, if there is any, occurs chiefly on the haulage roads with the boys. I do not think that there is anything of that sort in our mines.

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Mr. William Sewell.

26 June 1907

24385. (*Mr. Smillie.*) Supposing it was the custom in a colliery to allow 20 men to ride on a cage at the same time, and by law it was limited to 10—you have not suggested any number, but that is what you mean to prevent it going beyond a certain number ?—Yes.

24386. In that case, instead of having to run 20 cages you would have to run 40 ?—That is so.

24387. So that you would have 40 risks instead of 20 ?—That is so.

24388. Dr. Haldane's point is that the risk ultimately would be the same ?—Yes, only it would not be so great if one went wrong.

24389. You would have two risks against one ?—Yes.

24390. Is it the custom in your county supposing a father and four sons were in the pit bottom at the same time to allow those five to travel in the same cage ?—Yes, there is nothing to stop them. I have five sons working in the mine, and two come up with me every day. I have seen five of us on the cage at once.

24391. If anything went wrong the whole family is wiped out. It would be a very nice custom if you did something to prevent that taking place. Do you know any case in Derbyshire where the fireman has anything at all to do with the regulation of the output, or has to see to the output going out, or exercise any supervision over the output ?—Yes, it depends a little upon what district he has. If he has a small district—he has in our colliery—he has to look after the output. There are what we call "corporals," or "doggies," they are sometimes termed, who are responsible for getting the stuff out. He is solely responsible for the safety of the road but he has a certain amount of responsibility on him for getting the coal out of that particular district.

24392. If the district is small, in addition to looking after ventilation and timbering, he has to look after the output ?—He has to look after getting the coal out.

Mr. JAMES CLARK, called and examined.

Mr. James Clark.

24393. (*Chairman.*) Do you represent the Durham Deputies Mutual Aid Association ?—Yes.

24394. Have you been a deputy yourself ?—I have been a deputy about 25 years or over.

24395. Are you still working as a deputy ?—Yes.

24396. What does your Association represent ? Does that represent practically all the deputies in the county of Durham ?—About two-thirds of them.

24397. Is the other one-third outside your Association, or have they an Association of their own ?—Some are in the Miners' Association, and some are outside altogether.

24398. You, however, represent the majority of deputies in the county of Durham ?—Yes.

24399. You speak not only for yourself, but for the Association ?—I speak for the county.

24400. You say that no deputy should be allowed to fire shots whilst having to follow his ordinary duties at the face. Some deputies that have small districts and can get through their districts without taking up the whole of their time, are sometimes occupied on other work from time to time, and it is that you object to, or is it only to shot firing ?—We object to any shots fired during the day by deputies. Where a deputy is not fully employed in looking after his men at the face there is another kind of work assigned to him, ordinary shift work, or any special timbering. He has this to fill up his time, and where a deputy is fully employed he cannot, with that safety necessary to himself and the men he has to fire shots for, attend to this duty too.

24401. You do not object to a deputy doing various duties in connection with the mine that do not affect the safety of the miner. His first duty is to do everything necessary to ensure the safety of the mine ?—Yes.

24402. In addition to that, where he has a small district it is usual to take a part, on behalf of the management, in the working of the mine, that is, to look after the trams, and so on ?—Yes.

24403. Do you object to that system ?—We do not object to anything except the shot firing.

24404. Do you object to his being obliged to look after shot firing ?—Nothing apart from the shot firing. We simply object to the shot firing.

24405. Why should you object to the shot firing more than other kinds of duties that take up his time ?—Because we regard shot firing as being a more dangerous work than the ordinary timbering or making places ready in connection with the working of the districts, and a very slight mishap on the part of the deputy might lose his life and those he is firing shots for.

24406. You consider that the deputy as shot-firer should on all occasions be different people, or that the deputy should have certain times assigned to him for looking after shot firing, and that he should have nothing else to do during those hours ?—We think that there ought to be a special class of men appointed as shot-firers.

24407-8. Quite distinct from deputies ?—Yes, apart altogether from deputies.

24409. Then you say when a deputy has made complaints respecting over-work through having too large an area and number of men, and gets no redress from the management, that he should have power to appeal to the Inspector of Mines for the district, whose decision shall be binding. You propose that the inspector, if appealed to by a deputy on the ground that the district is too large and that the deputy cannot do all that he ought to do, should have power to call in the Inspector of Mines, whose decision shall be final ?—When other means have failed. First of all he must seek redress from the management, and if he and the management cannot agree as to what is reasonable for the deputy to do, then as a final resort he should call in the Inspector of Mines to say whether the deputy has too much work or not. There is a general complaint throughout the county now in consequence of the large area the deputy has to travel. The districts are so wide, and the number of men to follow so many, that it is practically impossible to follow the men to do justice to them and with safety to themselves.

24410. Can you not put those instructions before the Inspector of Mines now and get him to suggest to the management when he considers these districts are too large ?—The law does not give us any power to do so.

24411. You can make any representation to the Inspector of Mines you like if it concerns the safety of the working of the mine. It would be open to you to make any complaint to the Inspector of Mines, and he might make any representation he thought fit to the management: whether the management would be bound by it or not is another matter. Section 42 of the Coal Mines Regulation Act says: "If in any respect . . . any inspector finds any mine, or any part thereof, or any matter, thing or practice in or connected with any such mine, or with the control, management, or direction thereof by the manager to be dangerous or defective, so as, in his opinion, to threaten or tend to the bodily injury of any person, he may give notice in writing," and so on. He may go further than that. If remedy is not applied immediately he can report to the Secretary of State. You say he ought to have further powers, and without reporting to the Secretary of State that he might be empowered by law to compel managers to do anything he thought right in the re-arrangement of districts ?—Yes, that is our position.

24412. Then you say that no person for any cause whatever should have power to call a deputy away from the district over which he is in charge, except the person in charge of the mine for the time being. I suppose nobody could have the power to compel a deputy to go away from a district of which he is in charge except the under-manager or anybody in charge of the mine ?—We want to have that made very explicit and compulsory. It is common now in small districts where there is not sufficient work for a deputy to do, to give a deputy certain duties to do outside of his district altogether, such as shift work, which would take him away from his district.

24413. It is only the under-manager who does that ?—The management in some instances. In the event of anything going wrong with the working, supposing there was a stoppage of work outside the district of which the

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deputy has charge, it is a common occurrence for a trolley-way-man or any man immediately concerned with that kind of work to immediately call for the deputy, and if he does not go at once he has to give an account, and often he has to leave his men unsatisfactorily provided for. Our Association wants something to prevent this being done, and they want a deputy not to leave the district over which he has charge, unless the orders come direct from the person in charge of the mine at the time, either the under-manager or the manager.

24414. He is not bound to take any notice of orders that do not come direct from the under-manager or the manager? —He is sometimes not pleasantly treated if he does not do it.

24415. Then you advocate the prevention of deputies drawing timber during working hours at the face. Do you mean that all timbering should be done between shifts?—Yes. We want the same thing as to shot firing. We want deputies to be relieved from timber drawing altogether, and to have timber drawing set apart just as shot firing. I think you will see the necessity for that: in the longwall working, particularly, it is the duty of the deputy who has charge of the district in every shift he goes round, to go into the face where the men are hewing occasionally, and the tubs are going in and out, and wherever that noise is going on it is not safe for him to do so. In the next place it is not safe to the men left working in the face after the deputy has left, because it is a common thing, after he is there with the wall behind the packs, for these places to close up. The men complain daily, but the management insist upon the timber being taken out, and we consider, in the interest of the hewer and for the better protection of the deputy, that this ought to be done apart from deputy work, done, say, at night.

24416. It has been suggested to us in some cases that it is so dangerous to draw the timber that it ought not to be drawn at all?—There are cases where we consider that it ought not to be drawn ourselves. In any case it is very unsafe for a deputy to have to draw timber while the men are filling coal in the tubs with their shovels, and the tubs going in and out. He cannot hear any warnings, and after he has left the face there is danger for the men to be working until the place has got really settled. Not only that, but it is not an uncommon thing for there to be a blow of gas after there has been a lot of timber drawn.

24417. With regard to your 25 years' experience as a deputy, where have you had it?—At Westwood Colliery, that one colliery alone.

24418. Before that did you work at any other colliery?—I did six months' deputy work at Burnhope Colliery before I went to Westwood, but I do not take that into account.

24419. The whole of your experience has been at Westwood?—Yes.

24420. (*Mr. Enoch Edwards.*) Would you mind defining to us the duties of a deputy?—The duties of a deputy are to examine all the main roads, intakes and outlets, and follow his men in the face, to see that all his refuge holes are kept clear, supply his men with a proper supply of timber of the right lengths, and anything that tends to the general preservation of the hewers' life, and everybody under his charge, and also when he leaves him to leave him in a position that he will be able to keep himself safe.

24421. Besides the manager, the under-manager and the deputy, have you firemen now?—Shot-firers?

24422. Yes?—No.

24423. The deputies do all the shot firing?—The deputies do not at our colliery.

24424. Who would do it?—The stonemen fire them themselves. There are no shots fired at our place.

24425. Ordinarily who would fire when shots are fired?—If there were any coal shots to be fired, do you mean?

24426. Yes?—The deputy would either fire them, or some of the stonemen, who had a licence to fire them.

24427. Licensed shot-firemen?—Yes.

24428. Any man having such a licence would fire the shots?—Yes.

24429. This suggestion of yours that no deputy should be allowed to fire shots whilst having to follow his ordinary duties at the face applies to your county, and not to your particular pit?—Yes, we represent the county.

24430. You have had these questions before you as a body, and have considered them as a whole?—Yes.

24431. You have come to the conclusion that where shots have to be fired the deputy should not be called upon to fire them while following his ordinary duties, but if they are to be fired at all that there should be a special man to fire them?—Yes.

24432. When you say that no person, for any cause whatever, shall have power to call a deputy from his district, if the under-manager or the manager does not call him away, who does?—In some cases it is the trolley-way-man.

24433. The manager of the pit, first of all, is the general officer of the colliery?—Yes.

24434. The under-manager is the next?—Yes.

24435. There is nothing between those two and the deputy?—No.

24436. Who has power to call you in the absence of the manager or the under-manager?—Nobody has power, according to the Act.

24437. In practice who has power to call you?—Nobody has power in practice, but it is a practice that is carried out nevertheless: they have not the power to do so, but they assume the power.

24438. (*Mr. Ratcliffe Ellis.*) Who is it?—There are the trolley-way men who are in charge of the districts. Supposing a driver goes off a long way with a load of tubs, and it is not convenient to attend to them at the time, he will send for the deputy to come and put it right. If the deputy does not come he is taken to task by either the manager or the under-manager for not seeing that the work is being got on in his district. We want to have it that that man shall not have the power to send for us.

24439. (*Mr. Enoch Edwards.*) I want to get to the bottom of this. There are only two people above you in the mine, the manager and the under-manager?—Yes.

24440. Do you suggest that other people may order you about?—Yes. I suggest that is a county practice.

24441. This man has no control over you?—According to the Act he has no control whatever.

24442. Get outside the Act for the moment. In practice would he have power to employ or discharge you?—Not at all.

24443. You are not under his control?—Not at all.

24444. How does it come about that you are called upon to obey his orders? Have you had that instruction from the manager?—It is the practice in the county.

24445. I understand that, but you have had instructions from the manager or the under-manager that you must obey this man if he calls you to put a load of wagons on the road?—Not in the particular colliery, but it is a county complaint that that is so.

24446. That the under-manager or manager has given instructions to the deputy to obey this man's orders?—To obey anybody's orders to get the work out.

24447. Hardly anybody's orders?—Anybody who is interested in getting the work out—anybody that has any charge in the pit at all.

24448. (*Mr. Ratcliffe Ellis.*) Somebody says to you that the things are off the road and it is blocked, and you consider that you must get it open or the whole place will be stopped. If that happened, the manager would come and say "Why does this happen?"—Yes.

24449. (*Mr. Enoch Edwards.*) It happens in practice that besides the manager and under-manager, other people call for your services for anything they like?—Yes.

24450. That you object to?—Yes.

24451. You think you have strictly definite duties to attend to?—Yes.

24452. All those duties tend to the safety of the men?—Yes. I may say this, we do not object as far as we have time to do it, but we object to be called away from the face when we have duties demanding our attention at the face.

24453. You suggest that some of the districts having a very large area to get over are bigger than you can get round?—Yes.

24454. And that already you have more work than you can attend to?—Yes.

24455. You suggest in addition to that, although you have more work than you can do, it is open for the trolley-way-man to fetch you from the work you are already overburdened with, to do other duties?—That has been the practice.

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24456. Is it a common practice? Does it happen often?—It is a very common practice in the county.

24457. What steps do the deputies take in this pit to remedy it?—They appeal to the manager or under-manager to be relieved, but this is where the dissatisfaction comes in between us and the management. The manager contends that we have not over much work. The deputy contends that he has over much, and hence the dispute arises between the parties. Who is to settle it? We consider that it is time to call in the inspector to say.

24458. You heard the Chairman read out the copy supplied by Mr. Ellis of the paragraph relating to the powers of an inspector?—Yes.

24459. Has it ever occurred to you as a body to make representations to the inspector?—No.

24460. You have not done it?—No.

24461. What has been your reason for it?—We have not had any particular reason, I daresay, for it.

24462. Have you thought, for the time being, under the law that he had no such power?—We did.

24463. You think that may be the reason why you did not?—We thought his powers simply allowed him to make a recommendation, but that he had no power to enforce his recommendations. We want the inspector to have power to enforce what he believes is reasonable.

24464. If it is a question of the inspector deciding what is a fair amount of work for a deputy to do, you may be right—I mean as to what he is capable of doing, or ought to do. What you want to put before the Commission with regard to safety is, that when you are in charge of these men at the face you should not be drawn away from the work, thereby seriously affecting the risk to the men who are working there?—Yes.

24465.—With regard to the prevention of deputies from drawing timber during working hours at the face; that is a part of the deputy's duty, to draw timber?—Yes.

24466. It is not a part of the collier's duties?—No.

24467. Or to set it?—Except for his own safety.

24468. In your absence, if there is a place dangerous, he has to put it up?—Yes.

24469. Drawing he has nothing to do with?—No.

24470. Are you compelled to draw all this timber?—It is possible to draw it. We are frequently found fault with because it is not cleaned. It is to the advantage of the deputy and coal-hewer and the colliery on the whole, if the timber can be cleaned.

24471. That is the proper management of the face of coal?—Yes.

24472. You complain of drawing timber during working hours?—Yes.

24473. What is there to prevent you now leaving drawing that timber until the pit has done?—There is nothing to prevent it that I am aware of, if we were allowed to do so. It could be left and done at nights.

24474. Have you ever put that question seriously to the management?—We have suggested it, but we have never tried to enforce it. We have never put up props sufficiently strong, but we have suggested to the management on more occasions than one.

24475. You suggest to the management that there is an element of risk in drawing this timber while working? What is their reply to that?—Many of them consider that there is no risk. They think it can be done quite easily, and that there is no particular risk.

24476. In those cases have they seen the working faces themselves?—Yes, they travel the face.

24477. The under-manager?—Yes.

24478. Does he travel it every day?—They travel different districts.

24479. The manager does not travel it?—Yes, occasionally.

24480. The under-manager travels it every day?—Yes, one part of the district one day, and another part another.

24481. In merely travelling through a coal face, is it possible for the deputy to know of his own knowledge the seriousness of drawing those back timbers unless he looks?—The under-manager, do you mean?

24482. Yes?—If he looks he cannot do otherwise than see.

24483. In going through the faces would he make it his business to look at the back timber?—Invariably he should; I could not say he always does it.

24484. It is included as part of his duties that he should do it?—Yes.

24485. It is a question of his judgment against yours—that is the position?—Yes.

24486. Are you asking that the inspector shall decide the point between your judgment and that of the under-manager?—In the case of timber drawing we do not ask for the intervention of the inspector. We ask it to be binding that the deputy shall not draw timber during the day, hence it does not require the intervention of the inspector at all.

24487. There are no physical difficulties in the way of drawing this timber after the shift is done?—I am not aware of any. I might say in the drawing of juds, where they are not working longwall but board and pillar, that the jud comes off during the day and stands till night. It is sometimes to clean to get to the next place the next morning. It might interfere with that, but that could be overcome by the shifter going in a little sooner and getting it clean and drawn, and there is any amount of time to get ready for the next morning.

24488. In following out your duties what you have to say now has reference to the coal face?—Yes.

24489. Who is responsible for timbering the roadways—the deputies?—Yes.

24490. That is part of their business, to see that the timber in the roadways is good?—Yes.

24491. If it had to be replaced with fresh timber they would have to do that?—Yes, all places leading to and fro where the men are working.

24492. You do not suggest that comes in the same category as being done after the pit is finished?—Any that is drawn; but the setting of timber we do not; just the drawing of timber.

24493. You have to replace timber in a main road even that is broken down?—Yes, if the timber gets broken.

24494. The deputies do that?—Yes, they could not do otherwise.

24495. Is that done during the working of the pit?—In some instances where it is not safe to go all day, but if, in the judgment of the deputy, the place is safe to go till night, it stands over and the shifters do it at night.

24496. They would be under the charge of the deputy?—There is not a complaint against a deputy for it.

24497. The shift would be under the charge of somebody?—Under the charge of the master-shifter, and they have a night shift deputy.

24498. The master-shifter would have authority to do it. He is selected for that office because of his capacity?—What work we do is done during the day, and the master-shifter at night instructs the shifter to do it.

24499. I should like to ask you a question with reference to certificates for this class of men. Is this a matter you have discussed between the deputies, that they should hold certificates of competency?—It has not been a question of open discussion at our councils, but the thing has been very much discussed, I daresay, locally throughout the county.

24500. Do any of your deputies hold second-class certificates?—Not a great number, but a number do—not such a large number.

24501. Do you think it advisable that this class of man should have some certificate of competency?—A second class certificate, do you mean?

24502. Yes?—I daresay that is the feeling generally throughout the county by the deputies.

24503. A certificate that would warrant a manager in the belief that the deputy was competent to discharge all those duties?—Yes.

24504. That is, that he must have had considerable practical experience and practical knowledge, and obtained a certificate. There is no difficulty in the mind of the man who employs you when you understand the work?—Yes, and, I daresay, that is the general feeling of the county, that that ought to be the case.

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24505. (*Mr. Ratcliffe Ellis.*) Is this Deputies' Association an association apart from the Miners' Association ?—Yes : it seceded from the Miners' in 1875.

24506. You have an association of your own ?—Yes.

24507. You have had a meeting of your members to discuss the questions that have been submitted to the Commission ?—Yes.

24508. The answers you have given to-day do not apply to yourself particularly ; for instance, you have no shot-firing ?—They do not apply, individually, to our colliery, but they apply to the county at large.

24509. So far as shot-firing is concerned, that does not apply to you, because you have no shot-firing at the face. With reference to the complaints of over-work, is your own district too large ?—I could not say that we are labouring so much under that just at present, but the work varies. The districts worked vary occasionally, and sometimes they are overtaken by faults, which require the men to be shifted, so that at one time you have an over-large district, and a fortnight or so after that you are in your normal condition again.

24510. Take your own case : have you had any complaint ?—At present we have not.

24511. Have you had times when you have had too large a district ?—Yes.

24512. What did you do then ?—I appealed to the under-manager.

24513. What was the result ?—I daresay, in most of the cases, if not all, we have got redress ; but all managers are not alike.

24514. As far as your own personal experience goes, where you have found the district too large and you have complained, it has been redressed ?—Yes.

24515. With regard to persons calling upon you away, is it part of your duty to see that the roads are kept clear ?—Not according to the Act.

24516. But according to your agreement with your employer ?—There is no agreement entered into, that is, in that respect.

24517. You have certain duties to perform as a deputy ?—Yes.

24518. Is one of those duties to see that the roads are clear, so that there is no block in the traffic in going along ?—The manager looks upon that as a responsibility upon our part.

24519. If you are engaged at the face in your inspection, and a messenger comes to you to say that the road is blocked because there is a tub off the line, you do not personally go and put it on ?—We go to assist.

24520. You go to see that somebody else does it ?—It is a common thing to have to go and do it yourself.

24521. That is part of your duty, to see that the place is kept clear ?—Yes.

24522. It is not anybody ordering you ? When you get information that there is something wrong, it is your duty to see that the block is removed ?—It is a part of the duty which the manager is trying to devolve upon us, which we are objecting to.

24523. It was rather put that somebody ordered you to do something. At present it is your duty, rightly or wrongly, to see that the roads are kept clear for the traffic ?—We do not admit that it is a duty.

24524. You do it ?—The manager looks upon us as being bound to do it as a moral duty, but we shrink from it ; we object to it.

24525. It may be right or wrong, but at present it is recognised as part of the duty of a deputy, that he must see that any block in the road is removed ?—Yes.

24526. A messenger comes to you to say that the road is blocked and that the tubs cannot go along it, and you have to see that it is removed. That is the position. You want to be relieved from that position ?—Yes.

24527. Whom do you say should be responsible for seeing that the block is removed ?—The man who has charge of the drivers, a trolleyway-man. He ought to go, and if he cannot manage it himself, let him get the putters or some of the other drivers.

24528. I do not see what harm there is in sending for you as being the person in charge. Supposing there is a block, it is for you to see that that block is removed and traffic is restored ?—I have said that we do not object to do anything that we have time to, but a deputy has duties in the face that want to be attended to, and a message comes that he has to assist to get a tub on the line. He leaves the face to go back to get the work away, and in his absence something occurs at the face.

24529. Your point is that you have sufficient to do at the face without having to see that the traffic is kept going on the roads ?—Yes, that is our position.

24530. What have you to do at the face ?—We have to get all the timber for the hewers and make their places safe, and examine the goaf edges and places throughout to see that there is no gas, put up the canvasses to keep the gas clear, and when we leave we have to leave a sufficient supply of timber for the men to keep themselves safe in our absence.

24531. Your view is that that is sufficient to occupy the time of the deputy without having to do other work, such as seeing that the roads are kept clear ?—Yes, the tramways where the putters have to put, and the drivers are driving, we have to see that they are kept right as well.

24532. You think that your duties should be confined solely to seeing to safety at the face ?—Yes.

24533. The deputies in your county set the timber ?—When they are in the face, if there is any necessary to be set. In their absence they leave lengths for the hewer to keep himself safe. If they want any set when they go in, it is their duty to set it for them.

24534. My impression was that you have to see the timber right when the hewer goes in, but that he has to see to it afterwards ?—No, after we go out.

24535. You have to see that the timber is right when he begins work, and during the day inspect the places to see that he puts up what is necessary for safety during the day?—Yes.

24536. You are a skilled timberer, it being part of your duty to set timber. Your are a skilled man in that way ; it is your duty also to withdraw the timber ; is that so ?—Yes, at present.

24537. Do you say you have not time to withdraw the timber ? Is that your objection ?—No, that is not our objection.

24538. What is your objection ?—Our objection principally is that it is not safe for the deputy to draw during the day. It is not safe for himself, and not safe for the hewer to hew after the deputy has drawn the timber.

24539. Have you had any accidents in consequence of that ?—Yes.

24540. In consequence of the timber being drawn during the time the deputy was at work ?—Yes.

24541. Your time of work runs along with the hewer. When the hewer has finished you have finished ?—We have finished in the face, but we have to see them out of our district.

24542. That is the time that the timber should be withdrawn ?—Yes.

24543. How many coal-getting shifts do they work ?—Do you mean the coal hewers ?

24544. Yes.—Eleven shifts.

24545. No, how many shifts in the 24 hours ?—Two shifts.

24546. Are there some collieries in Durham where they work three shifts ?—Yes.

24547. Are there many ?—At most, I daresay, of the eastern collieries where the large collieries are, they work three shifts.

24548. When does the first shift go down where they are working three shifts ?—They go down at four o'clock in the morning.

24549. When does that shift end ?—The back man goes down at ten, and in the face they arrive at eleven o'clock.

24550. There is no time between those two shifts to draw timber ?—No.

24551. When does the third shift go down ?—I could not say. I think it is six o'clock.

24552. These shifts work about seven hours at the face ?—Seven from bank to bank, not more than five on an average in the face—scarcely that.

24553. Where there are three shifts working, when would this timber be drawn ?—The coal-hewer has done hewing shortly after three o'clock in the back shift.

24554. That is the second. What about the third ?—Say the third does not go down till six, then it is near seven before he gets there, and there is practically three hours to draw timber.

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24555. Is that the time during which you suggest the timbering should be drawn?—Yes.

24556. Whom do you suggest should draw the timber?—We suggest that men should be specially appointed for it.

24557. Is there enough work for specially appointed men?—Where there is longwall there is sufficient work.

24558. At the present time you look after many things and draw timber, too?—Yes.

24559. If a man had nothing to do but draw the timber, how long would it take him to do it?—There are districts where it would take him his whole shift to do it; it would take more than one.

24560. It does not take you all that time?—No.

24561. In your case how long would it take a man to draw the timber which you have to draw?—There are districts in which it would take more than one, but where there is not there is sufficient shift work, such as making places ready.

24562. Take your own case. What time does it take to draw the timber?—That would be difficult to get at, because ours is longwall working, and we have to go twice round the face in the day, and we take so much in both shifts.

24563. You do it yourself. The result of that is that you help the colliers?—Yes, but at a risk.

24564. So far as you are concerned you do it with your other work. This special man who is going to be appointed in your own case, how long would it take him to do it?—The amount of drawing that there is in the two shifts in my district I should say would take a man his shift to do to draw it at night.

24565. You must be pretty hard pressed if you have to do that and all your other work?—Yes, we are.

(*Mr. Smillie.*) The man he proposes would deal with two or three shifts.

24566. (*Mr. Ratcliffe Ellis.*) A man cannot stop down more than eight hours if the Eight Hour Bill is passed. You would want a man for each shift?—No. After the two shifts were finished one man going in with somebody else to assist him would take away all the timber necessary to be taken out for that day for the two shifts.

24567. It means two more men would have to be appointed for the purpose of drawing the timber?—Yes.

24568. In your view that is really necessary for safety?—Both for the safety of the deputy and the hewer himself.

24569. With reference to shot-firing, it does not apply to your colliery, but you are acquainted with the facts at other collieries. Take a colliery where coal shots are fired. Do you know such a colliery?—Yes.

24570. Are the shots fired between the shifts or during them?—During the shifts.

24571. Do you know where they are fired between the shifts?—No.

24572. Where they are fired during the shifts the deputy fires them?—Yes.

24573. With a competent man and a licensed shot-firer?—Yes.

24574. Is it because he has not enough time to do it that you want a shot-lighter appointed?—Partly because he has not time to do it, and at the same time we regard the haste he has to do it in. He is not able to give that sufficient care to the firing which is necessary.

24575. It comes to the same thing; he has not time to do it?—There is danger in doing it.

24576. Has your district many accidents from shot-firing?—There are a good many accidents through shot-firing.

24577. Happening because it is done too hastily?—It would be largely minimised if there was time.

24578. You think that this shot-firer should do nothing but attend shots?—Attend shot-firing first, and if he has not sufficient work to do in firing shots, there is sufficient to help in keeping the district right.

24579. He is to do that, too. What has he to do besides firing shots?—There are always places to be made ready for the men to get to.

24580. Is he to do that?—I said if there is not sufficient work in the face to fire shots, that there is always work to fill up his time.

24581. Would he fill time doing the deputy's work—putting timber up?—Not till he has fired his shots.

24582. His duty would be to fire shots and do deputy's work?—I would not say that is right.

24583. You say if he has not sufficient shots to occupy his time that he would see the places were right; that is deputy's work?—Not deputy's work. Sometimes one place is finished and there is another place to make ready. That is regarded as being ordinary shift work.

24584. Who does that now?—Shifters. They have a class of men known as "shifters," who do this class of work.

24585. Is he to do the work of a shifter as well as a shot-lighter?—If his time is not fully occupied in firing shots. He first of all discharges his duty as a shot-lighter. There are some districts where the deputies fire four or five shots each, and there are other districts where the deputies fire, on the average, 30 shots a shift. That and carrying a cable and his battery and his detonator, and all the things with him for the purpose of firing the shots is too much for him to carry about.

24586. That is the deputy. Take a case where there are four shots to be fired. That is not too much for one man?—I say that man could fire the shots, and if there was not enough work there would be sufficient shift work to employ the rest of his time.

24587. It would not be a man who fired shots and nothing else, but he would also do shift work?—Yes.

24588. That is your idea?—Yes; it frequently happens now, when a deputy has not sufficient work, that he fills up his spare time by doing shift work.

24589. The deputy can do that again if he has time to do it?—Yes.

24590. He has not time to do it, you say?—No.

24591. With reference to the question of the inspector, you suggest that if the manager and the deputy do not agree as to the size of the district and the work he has to do that there should be an appeal to the Mines Inspector?—Yes.

24592. Would you prevent the manager discharging the deputy?—Most certainly, without he gave some just reason for so doing.

24593. Is there anybody about a pit whom a manager is not entitled to discharge now?—Not without a reason. He could not discharge them.

24594. Not by giving them a fortnight's notice?—But he must give some just cause why he has dismissed him.

24595. Where do you find that?—That is the custom.

24596. There is nothing in the Act with regard to that?—No, but it is the history of the coal trade.

24597. Do you propose to put a fireman on a different level from anybody, except the checkweigher?—No, there is no other man labouring under the same responsibility.

24598. Your view is, if a manager is dissatisfied with a deputy, that he cannot discharge him?—If he is satisfied that he is not a capable man he can give just reasons to show that, and refuse to take the responsibility of his appointment, and discharge him. That we never object to; but for a manager, because a deputy complained he had over-much work, to have the power to discharge him, we protest against that.

24599. He has that power now?—I have not seen that, according to the Act.

24600. I cannot see anything in the Act which prevents him having that power?—I have not seen anything in the Act to give him that power.

24601. You think that is the law. If a manager is dissatisfied with a deputy he cannot discharge him without giving a satisfactory reason?—No, he cannot.

24602. Supposing that the reason is not satisfactory to the deputy, what has the deputy to do?—He appeals to the owners.

24603, Supposing the owners say that they think that the manager is right, what happens then?—Then we take it to a higher court.

24604. What court?—If they dismiss him unjustly, we can appeal to the County Court.

24605. If they give him notice to terminate his engagement, you cannot do so. But he must give some reason why.

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24606. Is that the rule in your county?—That is the custom.

24607. They cannot discharge a man by giving a fortnight's notice, but must give a satisfactory reason?—They must give a satisfactory reason as to why he is discharged.

24608. And if the reason is not satisfactory to the deputy, he can take him to the County Court?—Of course we would do that. We have not done that, but we would do that.

24609. Is that your view of the law in the County of Durham?—It is the law in the history of the coal trade right through the coal-field.

24610. So far as the Inspector is concerned, you propose instead of your having now the power, as you say, of taking him to the County Court, that the Inspector should be appointed as a judge between them?—Yes.

24611. That is your view of what the change should be?—We would submit to his decision, whether it was against or for us.

24612. Suppose the Mines Inspector decided that the manager was wrong, and he had to retain a man he thought was incompetent, would you relieve the manager from any responsibility that might arise in consequence of this deputy being retained?—I do not think there would be any special responsibility placed upon the manager for the retaining of this deputy.

24613. The manager is responsible if anything goes wrong?—Yes.

24614. He is responsible, if he does not appoint a competent man. If you, or the inspector, impose upon the manager a man who turns out to be incompetent, and trouble happens in consequence, would you relieve the manager from his responsibility?—If he can show that the man is an incompetent man, we should certainly agree with him in dismissing him.

24615. Supposing that there is a difference of opinion, and the inspector says: "You must retain that man," and he retains him, and trouble happens in consequence of that, would you relieve the manager from the responsibility which the Act now imposes upon him?—Decidedly, if the inspector's opinion was that he was a competent man.

24616. As to certificates, I think you said there should be a third-class certificate?—Yes.

24617. Would not the second-class be sufficient, instead of establishing a new examination?—The second-class certificate, which it is necessary for a man to hold, in order to occupy an under-manager's place, would not be necessary for the fulfilment of a deputy's duty.

24618. I am told that the deputy is the most important man about the place?—So far as his own district is concerned, in the absence of the under-manager.

24619. Whatever the district may be, the deputies go all over the pit. Would it not be sufficient if he had a second-class certificate?—To hold a deputy's position?

24620. Yes, if he wants a certificate at all?—I would not say that that was necessary.

24621. (*Mr. Wm. Abraham.*) It is more than sufficient. A second-class certificate that has to be passed now is more than sufficient?—More than sufficient for a deputy.

24622. (*Mr. Smillie.*) If more than sufficient, it would be sufficient?—Yes.

(*Dr. Haldane.*) What is the qualification of underground experience in the case of second-class?

(*Mr. Smillie.*) Five years.

24623. (*Mr. Ratcliffe Ellis.*) What examination do you suggest that a deputy should be subjected to?—That is a thing which we have not gone into in council. What I say is my own opinion. I say that a man should give some guarantee that he has had some experience in the face as a timberer, and should understand the nature of the strata, and have a thorough knowledge of the General and Special Rules, and that he ought to be a man who would give sufficient proof that he was interested in the discharge of the duties relating to a deputy.

24624. I should think if a man proved that, he would get a second-class certificate. You do not suggest what the nature of the examination should be, but you think that there should be an examination conducted by the Home Office in the same way as the examination for first and second-class certificates is conducted, but less stringent than the second-class?—Yes.

24625. And that they should have certificates?—Yes.

24626. With reference to your roads, the deputy's duty is to see that the roads are clear?—From the position of the manager.

24627. You have it to do now?—Yes.

24628. Do you find that your roads are blocked up at the side so that people cannot pass between the rail and the side, I mean by debris?—No.

24629. There is always plenty of room for people to pass? We always see to that. There are collieries where they do the same thing, but there are some where they cannot do it; they have not time.

24630. Do you consider it part of your duty to see that is so now?—Yes.

24631. In fact, the whole burden of your evidence is, you suggest that there is too much work put on the deputy—Yes.

24632. And you think in the interest of safety that that work should be sub-divided?—Yes.

24633. You think that shot firing, and the drawing of timber, should be taken away from him, and that he should not be required to see to the carrying on of traffic satisfactorily?—Yes, not to be responsible for it. He will do it as far as he has time, but he does not think he should be responsible for it.

24634. (*Mr. Wm. Abraham.*) As to the certificate, what you think is necessary, is that the man who has to be employed as a deputy, should have given some proof of his ability to do that work thoroughly?—Yes.

24635. You are not concerned with whether he should have a first-class, a second-class or a third-class certificate, if he can prove that he is able to do that work thoroughly?—Yes.

24636. You said, in distinct language, that it is your duty to see that traffic is kept going?—The manager looks upon us in that respect.

24637. You are doing it?—Yes.

24638. Is there any rule, either General or Special, by which that part of the work is designated to you?—No.

24639. There is no law compelling you to do what you do outside your duties, I mean as specified by the Special Rules?—There is no law compelling us.

24640. You are not told, when you are engaged as a deputy, that you are to do it?—No.

24641. Is it the sort of thing which you have to do, and not discuss?—Yes.

24642. What you object to is this, if I understand you rightly, not that you are unwilling to do the work in the district, but that you are obliged to leave some important thing in your district to attend to other things outside your districts?—Yes, occasionally.

24643. You are called out to raise a tram when you are engaged at the time doing something far more important inside the district than that?—Yes.

24644. If you do not do it, you are considered not to have done your duty?—Yes.

24645. As a class of men you want to be relieved from that obligation?—Yes.

24646. You said at your colliery that the districts you have to examine are not too large. As a member of your Association, do you know of districts that are considered by the deputies to be too large for them to attend to properly?—I could not say what collieries, but general complaints have been made at our Council meetings.

24647. Do they come from men working at collieries?—Yes.

24648. It is not the case at your colliery, but it is the case that complaints come to your Association from men at other collieries?—From the representatives of other collieries.

24649. All that you want is sufficient time, and a district of such a size, that it will enable you to do your work efficiently, as examiners and deputies?—Yes.

24650. (*Mr. F. L. Davis.*) You say that these complaints have come to your meetings from various collieries in your district?—Yes.

24651. Could you name any of the collieries?—I have said, a minute ago, speaking from memory, that I could not. With regard to the districts being too large, I said that at our colliery we have got redress, but our colliery

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is an exceptional colliery in the county, and the under-manager is one of the most exceptionally reasonable men. Appeals to him would be successful where they would hardly be successful in 99 other cases.

24652. If this is the only colliery you have worked at for so many years, might that not also apply to other managers you do not know ?—For the past 16 years I have been General Secretary of this Association, and my experience, from enquiring into cases of this kind, has taught me that I have not come across his equal very often —in fact, very seldom.

24653. (*Chairman.*) It might be as well, if you want to prosecute this question of managers, refusing to listen to complaints as to districts being too large, if you could produce somebody who had filled the position of deputy, and who was now in some other work and not subject to the influence of the mine owners, who could give first hand evidence as to anything of that sort having happened ?—The question suggests itself to me now, is my statement accepted or is my statement considered doubtful ? That is the question.

24654. (*Mr. Ratcliffe Ellis.*) You have nothing to fear from your manager ?—No, I would not have any fear with our manager, but, as I have said, he is an exceptional manager, and I am sorry there are not more like him in the county.

24655. (*Mr. F. L. Davis.*) I will not press the witness to give the names of the collieries or the men. You quite understand I was not disbelieving anything you said. When a manager engages a deputy he tells him what his duties are ?—It is a common practice to do so. If there is a vacancy in the case of a deputy the men in the colliery are generally acquainted with what the deputy's work is, and he is generally appointed to fill a position rendered vacant by some other person. If there is any particular matter the manager does mention it.

24656. He knows his definite duties and the manager tells him if there is anything wrong in the road or anything stopping the work he is expected to put it right. Does he not give you general instructions ?—It was not done with me.

24657. Perhaps he thought you know the work so well that it was not necessary ?—No ; when a man is appointed a deputy he is furnished with a copy of the special rules and the bye-laws, and at the same time with the licence and the keys, and he has to understand his own duties.

24658. Generally speaking, the man who is appointed a deputy has been working for some time in the pit ?—There are exceptions, but as a general rule that is the case.

24659. Can you give any instances of accidents that have occurred from drawing timber during the shift ? Your reason for wishing that duty to be taken off the deputy is because it is a danger to him and the other men ? —We have not taken a census of that, but from the number of deputies who have been lamed, and the number of non-fatal accidents which we have had, and for which compensation has been paid, we know they generally arise from the drawing of timbers.

24660. During the shift ?—Yes. I am not aware of a deputy who has been killed since the passing of the Compensation Act apart from drawing timber during the shift. He has always been killed in drawing timber.

24661. (*Chairman.*) Do you mean every accident to a deputy ?—Yes, with the exception of one deputy who was killed with his jack tram on the engine plane.

24662. How many have been killed or seriously injured ? —We have generally about two during the six months.

24663. Do you mean either killed or seriously injured ? —I mean two fatal accidents during the six months.

24664. About four accidents to deputies alone in the 12 months ?—Yes.

24665. That is in the county of Durham ?—Yes.

24666. You say that there is an average of two fatal accidents to deputies every six months ?—It will work out about two in every six months.

24667. That is about four a year ?—Yes, but I may say this : we have been remarkably fortunate this half year. This six months we have not had one, and we have passed a remark about it more than once.

24668. (*Mr. F. L. Davis.*) If you left the drawing of the timber until after the shift was over would that be in your shift or in the next deputy's shift ?—It would affect both our shifts. Neither I nor my man on the work would have timber to draw, but it would have to be done by a man in the night shift after the day shift was done.

24669. Instead of drawing the timber you do now you would have it taken off your shoulders altogether ?—Yes.

24670. It would be somebody else in another shift who would do the work ?—Yes, and we would have more time to devote to the protection of the men whose lives we have to take care of all the day.

24671. We have had a number of questions with regard to the wages of deputies in the different districts. Can you tell me about what the wages are that a deputy gets in Durham ?—The face wage from the deputies in Durham is 4s. 8½d. upon the 1879 basis, plus the per cent.

24672. (*Mr. Smillie.*) That is 40 ?—Yes ; it works out at about 6s. 7d. per shift now.

24673. (*Mr. F. L. Davis.*) Is that his total wage ? Is there anything else which he may get to make that pay ? —No. There is what we call the back bye wage when a man is not following his men is the face. He is working on shift work when the pit is not getting coals, doing repairs in the pit, drawing timber, and then he has 4s. 2½d. plus the 40 per cent.

24674. That is about £2 a week ?—Yes, it will work out at about £2 a week for the full time.

24675. (*Mr. Smillie.*) Has he a free house and coal ?—Yes, where we have not free houses we have rent.

(*Mr. Smillie.*) In addition to that it works out at 5d. per shift.

24676. (*Mr. Ratcliffe Ellis.*) What is the county wage for the hewer ?—I am not sure what the county wage is.

(*Mr. Smillie.*) 4s. 2d., plus 40 per cent. ; on the 1879 basis 4s. 2d.

(*Mr. Ratcliffe Ellis.*) It is about the same.

(*Mr. Smillie.*) Yes, with a free house.

24677. (*Mr. F. L. Davis.*) Is it your opinion that the deputies in Durham are capable men ?—Yes, we regard them as being capable men.

24678. (*Mr. Smillie.*) Have you any experience of pillar and board working ?—Yes.

24679. Is that the same class of working as we call stoop and room, narrow places and pillars left in ?—20 yard pillars and 4 yard boards.

24680. They take out the pillars in lifts of sections ?—Yes, 10 yards each way.

24681. They put in the timber to keep up the roof until 10 yards is cut ?—Yes.

24682. Then they draw the timber ?—Yes.

24683. That is a dangerous process, the drawing of timber in the pillars ?—Yes, that is what we object to.

24684. You require that everything should be very quiet when you are taking out that timber in order to enable you to hear the roof working ?—Yes.

24685. If there was a serious noise going on, such as the filling or running of trams you would not be sure whether it was safe to take the props out or not ?—Of course not.

24686. That is your experience ?—Yes, that is my experience.

24687. Does the same thing apply in longwall working ? —Yes.

24688. At the present time the deputies have to draw the timber while the coal getters are filling the trams ?—Yes.

24689. And getting their coals out of the back side ?—Yes.

24690. Over their head ?—Yes.

24691. What you complain of at the present time is that, even with quietness, it is a dangerous job, and it is more dangerous with the noise that is going on ?—Yes.

24692. Because you do not know whether the roof is working. The sounds from which the experienced man gets his warning he cannot hear because of the present state of the mines ?—No, sometimes we have to stop the men and the men complain about the loss of time.

24693. It is not their business really?—No.

24694. You say that this timber should be taken out by somebody at night when there are no men working at the face ?—Yes.

24695. So far as the deputies are concerned, they do not complain so much of the extra work as the danger of the circumstances under which they are withdrawn ?—There is not so much complaint as to the danger as there is of over much work to do.

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24696. Supposing the district of the deputies was lessened to give plenty of time to do it, they would still prefer it being done at night when there is no noise ?—Yes.

24697. If you are correct in your figures, an average of four deputies has been killed at this place on work for some time past. Would you follow that up by saying that had the timbering not been drawn during the day the probability is that this number would not have been killed ?—Undoubtedly, the full number would not have been killed, but I could not say that in all cases.

24698. This can only be an opinion ?—It would minimise this loss.

24699. The danger would be considerably less if it was done at night by special persons appointed ?—Yes.

24700. The statutory duties of a deputy are to examine the working faces and all the roads leading to the working faces along which persons may travel ?—Yes.

24701. In order to ascertain whether there is danger from any cause ?—Yes.

24702. That is a statutory duty under the Act ?—Yes.

24703. Would you venture the opinion that the deputy in collieries, especially fiery collieries, is the most important person engaged in the mine as far as the safety of the workmen is concerned ?—Yes, in his examinations.

24704. As a matter of fact, the lives of all the coal-getters at the face in a certain district are in the hands of the deputy for the time being ?—Quite so.

24705. That, in your opinion, would justify the very best class of men being appointed for that purpose ?—Quite so.

24706. A deputy in a fiery mine, at least, should have a knowledge of explosive gases ?—Yes.

24707. He should also have a knowledge from personal experience of the nature of the roof and sides ?—Quite so.

24708. It would be a wise precaution, and assist the manager in the selection of a competent person, if it were made compulsory that the deputy should hold a certificate of competency ?—Yes.

24709. It would assist him in selection. You would not object to it being made a second-class certificate, I mean the present second-class certificate. He would be all the better for that, although you do not think the qualifications at present required by that certificate are necessary ?—They would certainly be all the better for it.

24710. There are a considerable number of miners in Great Britain, in Durham, amongst other places, who hold second and some first-class certificates ?—Yes.

24711. Who are not engaged as managers or under-managers just now ?—Yes.

24712. You have stated that the deputies of Durham are a good class of men. You do not doubt that, but there is not much encouragement given to draw the best class of men towards that employment. There is no extra encouragement ?—There is no inducement.

24713. I mean in the shape of wages, or even employment ?—No.

24714. I think the most important part of your evidence, and it is very interesting, is the fact that while engaged as a deputy looking after the safety of the working by timbering or putting up screens, he may be called away to assist in putting trams on the road that have gone off ?—Yes.

24715. That would indicate, in the opinion of the management, the most important part of your duty is to make sure that the material goes out ?—Just so.

24716. I think that is the general feeling of the deputies, taking your county. I do not ask you to speak for other counties. I think the general feeling is to make sure that the trams will not stop ?—Generally.

24717. You would not object to being called out by the under-manager or manager to do certain work where there were special duties, but you are at present called out by persons who are not in charge, I mean by the trolleymen ?—Yes. If the manager calls us out of the face he takes the responsibility upon himself.

24718. At present, supposing you are called away to assist in putting trams on the road, and something went wrong at the face in consequence of your absence, an explosion, or anything else, caused by your being taken away, you would be held still responsible by the mines inspector ?—Yes.

24719. And the Law Courts ?

(*Mr. Ratcliffe Ellis.*) As a question of law I think he would not.

24720. (*Mr. Smillie.*) Supposing a trolleyman sends in word for you that a train of trams is off the rails, and you are called out to assist to put them on, your position is, if you refuse to go, that it is reported to the manager or under-manager, and he talks to you about it ?—Yes.

24721. He blames you for not having gone ?—Yes.

24722. Because for the time being the work is not going on ?—Yes.

24723. Supposing you go out on the next occasion after being sent for by the trolleyman, and something goes wrong at the face, you would be held responsible ?—Yes.

24724. Because it is your duty to look after the safety of the men at the face ?—Yes.

24725. The mines inspector and the Law Courts would hold you responsible for that ?—Yes.

(*Mr. Ratcliffe Ellis.*) I could not assent to that proposition.

(*The Witness.*) And a little further.

24726. (*Mr. Smillie.*) Yes, I was going a little further, and say that in Court your duties would be quoted from the Act of Parliament against you ?—Yes.

24727. Would you not be told that you were not bound to obey the orders of the trolleyman ?—That is our position, and that is what we object to. In the event of his coming out, I mean, a boy or a trolleyman, and the inspector of mines coming in and finding the district without the charge of the deputy, the inspector considers that he has authority to demand his dismissal.

24728. As a matter of fact the position of your deputies and your own position is that they should be confined to their statutory duties under the Act ?—That is our position.

24729. And that they should not be requested to do work of that kind unless they are ordered to do so by the manager or under-manager for the time being ?—Yes.

24730. So far as your own colliery is concerned, have you any complaint to make that the districts are too large ?—Not at present.

24731. I want you to speak, if you can, from your personal knowledge or what you can prove. Do you know any districts in Durham in which it would be a physical impossibility for the deputy to thoroughly examine his district under the Act ? That is expected under the Act ?—I could not speak of any.

24732. From personal experience ?—Not authoritatively.

24733. You have not been in charge of a district which you could not examine within the two hours of the Act ?—No.

24734. And all the roads to and from the faces ?—Yes, travelling in one and out the other all the way.

24735. Do you know whether the workmen in the colliery where you are employed are so well acquainted with the escape shaft, so that if anything went wrong where they usually ride, they would be able to find their way to the escape shaft ?—Is that in relation to our own colliery ?

24736. Yes, at the present time ?—We have several day holes, drifts out of our pit. There are any amount of holes out of that.

24737. Your colliery must be exceptionally placed for that ?—We are very near the surface.

24738. What is the depth ?—22 fathoms to the bottom seam.

24739. That is very shallow ?—Yes. All our seams run out close to the bank.

24740. That would be rather exceptional. Is yours a naked-light colliery ?—Yes: we have no lamps.

24741. Do you know whether or not, as a general rule, the workmen are so well acquainted with the whole of the workings of the mine that they could find their way to the escape shafts ?—I could not speak for other collieries.

24742. You are not aware of that ?—No.

24743. I am astonished at the statement you made to Mr. Ellis, when you said, if a deputy was dismissed by a manager without any apparent cause, unless he could give good reasons for dismissal after giving the fortnight's notice, he would appeal to the Law Courts. Is that so, really ?—We have not an agreement to that effect, and there is no law to that effect, but I understand we would do it.

24744. I understand that your Association would protect you in a case of that kind. I, with Mr. Ellis, am astonished to hear that you have any appeal to the Law Courts, or

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that you would think of it. Mr. Ellis and I are of opinion that a colliery manager may dismiss a deputy, or even an under-manager, by giving the ordinary fortnight's notice. I understand that the Association, of which that person is a member, would protest as strongly as it could that the manager should give some reason for doing so, and might bring a colliery out on strike to prevent it being done. Have they any appeal at law?—My position was this: we would test an appeal case.

24745. You have never done so?—No.

24746. (*Mr. F. L. Davis.*) He also said it was the custom in the coal trade that a reason should be given.—My answer to the question was this: In the case of a deputy being dismissed, and we could not get him reinstated by a local appeal to the manager, we should then take the case to the coal trade, to the owners, and invariably we have got redress there. Taken in its worst form, as Mr. Ellis was putting it, in the event of not getting redress I said we would take it——

24747. (*Mr. Smillie.*) You would appeal beyond that to the Law Courts?—Yes.

(*Mr. Smillie.*) Mr. Ellis is of opinion that you need not trouble.

24748. (*Dr. Haldane.*) Do you know any case in which the wages of firemen, taking the average of the year, are less than the ordinary wages of a man working at the face in your district?—Less?

24749. Yes.—No.

24750. That does not happen in your district?—The basis, to begin with, is larger.

24751. A man never loses money, as it were, by becoming a deputy in a mine?—No. He cannot very well lose money by becoming a deputy if he commences at a pit where they are working regularly.

24752. (*Mr. Smillie.*) Is it not the case that many hewers are earning 3s. or 4s. more than the nominal wage of the deputy?—Yes, but I am speaking of off-handed men. If he refers to piecemen, there are men who get considerably more than deputies.

(*Mr. Smillie.*) There are hewers at the face getting 10s. or 11s. a day at the present time.

24753. (*Dr. Haldane.*) It is important that a deputy should have plenty of practical experience at the face. I suppose we are all agreed about that?—Yes.

24754. Supposing a man has obtained plenty of practical experience at the face, is he not likely to lose money by becoming a deputy?—I should not say that.

24755. You would not say that he would, on the whole?—No.

24756. On the whole he has steady employment as a deputy?—He has regular employment.

24757. Which he can always rely upon?—Yes.

24758. Although he may not make so much at certain times as the man at the face, yet it is a better post?—There are some men whose qualifications as coal-getters, as piecemen, enable them while hewing coal to make considerably more than they can get by deputy work.

24759. (*Mr. Smillie.*) The real point is this. Does the wage paid to deputies at present encourage the best class of men at the coal face to leave the coal face and become deputies?—No, it does not.

24760. (*Chairman.*) You say that an average of four deputies is killed by drawing timber in the course of the year. I see in 1904 that there were as many as nine, although in 1905 there were only two. How many deputies would there be to every 1,000 men working underground in the county of Durham?—I could not say.

24761. About how many—1 in 1,000, do you suppose? How many deputies altogether are there in the county of Durham?—Slightly upwards of 2,000.

24762. That is about 1 in 50. Out of 2,000 deputies you say there is an average of deaths from falls of roof of four; that is to say, one-fifth per cent. That is 2 per 1,000 killed by this particular operation every year?—Yes.

Mr. Samuel Coulthard, called and examined.

Mr. Samuel Coulthard.

24763. (*Chairman.*) You have been requested to give evidence on behalf of the Northumberland Deputies' Mutual Aid Association?—Yes.

24764. (*Mr. Smillie.*) Are you at present a deputy in the county of Northumberland?—Until this day I think I am. It may be as well to state that I have now been appointed Permanent Secretary of the Association, and I am just beginning work this week.

24765. Up to now you have been employed as a deputy underground?—Yes, and have been for 31 years.

24766. You have had a very long experience as a deputy?—Yes.

24767. You have had experience prior to that of other classes of work underground?—Yes.

24768. It may be taken that you have a fairly good knowledge of underground work?—Yes.

24769. Is it confined entirely to Northumberland?—It is confined entirely to Northumberland.

24770 What colliery?—Seghill.

24771. You have spent 31 years as a deputy at Seghill Colliery?—Yes.

24772. Is that a fairly large colliery?—Yes, 700 or 800 men and boys.

24773. What is the depth of it?—One seam 50, another 70, and another 90 fathoms.

24774. You work three seams?—Yes.

24775. What is the method of working, longwall, stoop and room, or pillar and stall?—We have a great deal of longwall conches behind following the coal. In board and wall there are a considerable number of places where the seam is 6 feet 6 inches to 7 feet 6 inches thick, and that same seam is coming back broken, and we work out the pillars.

24776. That is because of the thickness it is not convenient to work longwall?—On account of the thickness it is difficult to work longwall.

24777. You speak, however, not for Seghill Colliery, or yourself, but for the Northumberland deputies?—I am here as the representative of the Northumberland deputies.

24778. As their general secretary you have a fairly good knowledge of the state of matters all over the county?—Yes, I am very well versed in it.

24779. As far as you know, is there any complaint as to the extent of the districts which the deputies have at the present time, or have had to look after?—Yes, we have had occasional complaints respecting the over-pressure.

24780. Of work?—Yes. We have had to deal with it on many occasions, and have had it put before the Northumberland coal owners. We think that there is a little too much exaction.

24781. May I take it that the statutory duties of the deputy as laid down by the Act of Parliament are to examine the workings under their charge in the morning, and all the roads leading to and from the workings on which persons may travel, and to look after the ventilation generally, and, if necessary, make a second examination during the day, and to generally look after the safety of the men? That is considered their statutory duty?—Yes.

24782. When you say that you have complained of over-pressure, do I take it that is because your districts have been too large to carry out your statutory duties, or duties outside of what your statutory duties were?—Perhaps it is as much outside of statutory duties, but which the law specifies for as well as the unwritten law.

24783. Your complaint generally has been that in addition to what you understood were your statutory duties, looking after the safety of the workmen as far as ventilation and timbering were concerned, other duties outside your statutory duties have been imposed upon you?—Yes.

24784. What duties?—Bringing a man away from his working face where he has to look after the men entrusted to his charge, coming out on the main road to do work at

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wheels, coming outside his flat to the wheel outside. We have occasionally found that kind of thing, and found redress when we have put it before the management.

24785. Were you sometimes called upon, in the event of a train of tubs coming off the rails, to assist in putting them on ?—Oftentimes we have had to do that.

24786. In the event of a fall taking place outside your district, have you been called out, in your experience, to assist in clearing it away ?—Many a time.

24787. That, of course, was in addition to your ordinary duties ?—Yes. I consider that a case of emergency.

24788. Have you experienced, or do you know from personal knowledge, that deputies are sometimes held to some extent responsible for seeing that the material is taken out of the various sections ?—That is so.

24789. That is considered an important matter, the getting out of the material ?—A very important matter.

24790. Those are your duties, and those are the complaints that have been made. Do you consider that the deputy in a colliery, and especially in a fiery mine, is the most important person about the colliery so far as the safety of the men is concerned ?—I consider after 31 years' experience that the deputy holds a very unique position in a mine; certainly he is a most responsible person. We have gone over the special Act of Parliament and have not discovered in the duties of any other official away from the manager more "shalls" and "shall nots" than are set down to a deputy. We feel that we are considered to be very responsible indeed.

24791. In your evidence you say "That when a deputy has made repeated complaints to the management respecting his work, he, considering it too much and finds no redress, should an accident occur, the responsibility of such accident be borne by the management as the case may be." Is the responsibility for an accident of that kind not borne by the management ? Is it borne by the deputy ?—Often at inquests we have had deputies brought to task severely in connection with their duties. Our fear is that it is a growing danger to-day, and that it may come to that. When a man is brought out of his district which he controls we think that there should be some person relegated to accept this responsibility.

24792. You have made repeated complaints ?—Yes.

24793. You are of opinion according to this, and you are speaking for the deputies, that in the event of your not being able to accomplish reasonably the work designed to you, and should any dispute take place between yourself and the management, that the management should not have power to dismiss you, but that you should have an appeal to the Inspector of Mines who should arbitrate between the management and yourself as to whether you were in the right ?—Yes.

24794. Is that the general opinion of deputies ?—That is the general opinion of deputies in Northumberland.

24795. With regard to shot-firing, is that done at the present time by deputies or competent persons specially appointed ?—Until within a very recent date we had not much shot-firing by battery in Northumberland. The collier in most cases fired his own shots, but within the last 18 months they have begun to introduce the battery, and the shots are being fired with the battery by the deputy.

24796. Is it a common thing for persons outside the deputy to be appointed for that purpose ?—At a number of collieries in Northumberland the management have appointed a class of men, apart entirely from the deputies to fire shots.

24797. That is the competent person under the Act ?—Yes.

24798. In many cases the deputy is appointed as a competent person ?—Yes, and the whole responsibility of shot-firing is thrown on the deputies.

24799. You are of opinion that an additional responsibility should not be placed on the deputy ?—Yes, for this reason; we are introducing shot-firing by battery on the deputies. He is not taken from his work as specified in the General Rule, and therefore the shot-firing is an additional burden to his already laborious work.

24800. If the district in which deputies are responsible were divided into two districts, would the deputies still object to being competent persons to do shot-firing under the Act if their districts were lessened ?—I should think that would take away considerably the objection. A conscientious man feels that he has too much put on him by the introduction of shot-firing by battery.

24801. They do not object to doing shot-firing in addition to their other work provided they are able to undertake it without danger to themselves ?—Generally speaking they would consider it would be most effectually done, and with less danger, if it was relegated to a person outside of the deputy altogether, but I think it would lessen the difficulty if there were a re-arrangement of districts so that a man could assume the responsibility for the work and take less part in it, only the owner says that the deputy is the proper person to fire the shots.

24802. A deputy might have a district with ten shots a day to be fired. Would it be possible to appoint a person to fire those and have no other duties to do ?—We find that is a difficulty.

24803. You would not suggest that an employer should require a person to do that alone ?—No; economical reasons could be given why he should not.

24804. Where there is in two or three districts combined sufficient work for shot-firers you think that it would be better if it was put on a person to do that and nothing else but that ?—Decidedly so.

24805. Would that be suitable for the men at the face ?—It would be very suitable for the men at the face; that would be an important point in regard to production.

24806. Then you say: "That no person (for any cause whatever) have power to call a deputy away from the district over which he is in charge except the person in charge of the mine for the time being and then only in cases of extreme urgency; also that no deputy be employed at any other kind of work that would fix him to one position so as to prevent him having his liberty at any moment while in charge of a district however limited it may be in area or with a small number of men to follow." Are there any persons at the present time in the mines of Northumberland entitled to call a deputy away from his ordinary work to go to something else with the exception of the manager or under-manager ?—Our greatest complaint in that respect is this: outside of the district, the flat inside which we consider it our duty to attend, if a boy has tubs off he invariably sends direct for the deputy; half-a-dozen times during a shift a deputy has to be going 300 or 400 yards from the face outside of his station for the purpose of lifting on the tub. In many cases it makes it quite impossible for him to get to his men to do what he feels he ought to do ?

24807. Does that apply to Seghill ?—All over; that is more or less the practice.

24808. That is the position all over the county generally ?—Yes. In the back, it would be the back overman. We consider if he sent in for us to come out, that he is the responsible man in charge at the moment, and when he calls us away from our duties the responsibility would rest upon him, but when a boy of 15 or 16 asks us to go out because the work is stopped, we think that it is a difficult thing indeed and that we ought not to be running in and out of the district.

24809. You are bound by law at the present time to obey the orders of the under-manager or the manager ?—Yes.

24810. You are bound by law at the present time to attend to the claims of the pony-driver or anyone else who may ask you to assist in putting on a tram. What would be the result if you did not do so ?—Notice.

24811. Do you think that complaint would be make to the overman that you refused to go out ?—Yes.

24812. It might lead to your receiving notice if you did not go out to carry on that work ?—In cases it has.

24813. It has done so in cases ?—Yes.

24814. Are you quite sure of that ?—Yes, I have had to deal with cases where the management have requested men to go.

24815. Do you think that deputies should hold a certificate of competency ?—Yes, I think there should be some form of examination. I do not think that deputies, generally speaking, would object to some form of examination.

24816. Do you think that the deputies of Northumberland generally are a competent and good class of men ?—I think generally speaking they are.

24817. Do you think it might improve the class and assist the manager in selection if it was necessary and made compulsory that they should hold a certificate of competency ?—I think generally speaking that would be agreed.

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24818. Would it be in the direction of greater safety if that were done?—Yes, the trend would be in that direction. You could have very strong men indeed who would make good deputies, and perhaps in other ways would be the means of lessening the possibility of accidents, and with very little scholastic attainment, perhaps not being able to pass an examination. A man of strong physique and strong judgment would make a good deputy apart from the mere examination.

24819. The danger would be that there might be a good man who could not pass the examination and consequently could not qualify?—I am certain of that.

24820. In the event of anything of that kind being done, the present deputies would in all probability continue their position, or get a certificate of service. There are a great many well qualified people now in the mines of Northumberland who hold first-class or second-class certificates at the working face?—Both colliers and deputies.

24821. Do you think that the deputies as a whole object to some form of examination for competency?—Some would feel that they would have to pass an out-of-the-way examination, that is to say, there is a timidity about the matter. It would not be an examination anything approaching that necessary for an inspector of a mine. I suppose it would be more in harmony with his duties; it would be a knowledge of gas and timbering, and things of that kind.

24822. Do the deputies do the timbering, or the workmen themselves?—The deputies generally do the timbering.

24823. Do the workmen at the face put up any?— If a deputy has provided the material the man is responsible.

24824. Do the deputies draw the timber?—We have created a new set of men to some extent in Northumberland. A number of collieries employ a man to draw timber apart from the deputies.

24825. In longwall workings?—Yes.

24826. And where they take it out, the pillars?—Yes.

24827. Do you think it is a dangerous employment?—Yes, it is a most hazardous occupation at times.

24828. Would you say as an experienced man that it is safe to draw timber in the longwall face or at pillars where there is the noise of men filling coals and shovelling out coals at the face?—No, it is very unsafe.

24829. In drawing timber you require to have, as near as you can get it, absolute silence?—Yes, you do.

24830. In order to know when your roof is about to come down?—Yes.

24831. It would be better you think if the timber was drawn at night, at least, between shifts, when there is no other additional noise?—Yes. The majority of deputies in Northumberland would say "Yes" to that.

24832. Have you had any accident from drawing of timber?—Yes, but speaking generally for Northumberland we have been pretty free from accidents. I believe we have a greater ratio of accidents in proportion to the men employed, but we are fairly exempt from fatal accidents to deputies. I would like to say this: One of the things that we put before our owners is that under the present circumstances deputies themselves have to draw the timber, and the Northumberland coalowners are anxious to keep it within their duties. At some collieries they employ a special man, but we think it increases the danger, because before the man commences to do the most hazardous part of his employment, he has been eight hours in the pit, and he is less physically fitted to do it.

24833. Do you mean the deputies?—Yes; that is one of the reasons we have been strongly in favour in Northumberland of there being drawers appointed to do the drawing of timber at night.

24834. A special class of man appointed?—Yes.

24835. (*Mr. F. L. Davis.*) Do the deputies draw the timber at the end of the shift?—In a number of cases in Northumberland.

24836. Just at the close of the shift?—Yes; in Northumberland there are collieries where they draw during the day. If a pit was done at five o'clock, the deputy would go to the man's place and tell him he wanted to start about three, and the pit would be done in that way. At a colliery alongside of us it is so unless it was a case of destruction of property. If he could take the timber out with safety it would be a saving and he would commence at once to draw it, but if it could stand without danger, another deputy would join him and the two would take it out.

24837. You think it is not desirable that people should work eight hours and then begin a hazardous job like that. You are strongly against that?—Yes, we are strongly against that.

24838. You said that complaints of too much work on the part of the deputies were only occasional?—Yes; I could not make a sweeping statement that it was general.

24839. In the pit where you were working was there too much work?—Sometimes. I have had reasons to complain to the management, and sometimes it has gone on a few weeks, and sometimes they have relieved us a little by taking a few men off us more or less.

24840. They have fallen in with your views?—Yes, in some instances they have.

24841. Do you suggest that the Mines Inspector should be the arbitrator between the management and the deputy?—Yes.

24842. In short, cases of too much work, or anything of that kind, do you think the Inspector would like to have that responsibility put upon him?—We have weighed this matter and considered it carefully as a joint committee. Going back five or six months, we considered in Northumberland that the owners were too exacting, and we gave considerable evidence to them, and there were a number of reasons why we thought they should relax, and we have asked for arbitration both as to the wages and responsibility; but they have refused arbitration, and we felt a little grieved.

24843. The owners have refused arbitration?—Yes, they have refused arbitration. We think the Government Inspector would be the best person to appeal to when it is a question of whether the deputies under the Act have a knowledge of the duty assigned to them, and where he feels he cannot carry it out with satisfaction to himself, feeling satisfied that he is doing his level best to lessen accidents with the men employed.

24844. Have you thought how it would work out? Supposing the Inspector took your view that you were right and the manager was to continue employing you, with lessened duties, we will say. Or supposing the manager said somebody was not a capable man and the Inspector said he was, and an accident happened, do you think that the manager ought to be relieved from his responsibility?—That would be a matter for consideration, I should say.

24845. He has no voice in it; he is over-ruled by the Inspector, and he has to keep the deputy on whom he does not think is capable, and an accident happens. In such a case as that is he to be relieved from responsibility?—It may be a side of the question we have not looked at, but we think that the evidence of the deputy and the evidence of the Inspector ought to be considered and to be set against the evidence of the manager in a case of that kind, but I agree that it is a very difficult point.

24846. You can conceive difficulties might arise?—Yes. We have had accidents even with the most skilled men where it would be on the part of the manager himself an outrage on commonsense and reason to say that he was incapable.

24847. I quite understand that?—I see the force of your position. In that case it would place the Government Inspector in a very difficult position.

24848. It would put the whole responsibility on him?—Yes, it would, to determine it, but he would have the evidence of the deputy on one side, and he would practically stand as an arbitrator between them, and that would be very strong evidence that the management was at fault.

24849. (*Mr. Ratcliffe Ellis.*) In cases where you have been overworked yourself in your district you have applied to the management for assistance of some kind, and you have got it?—In many cases I have.

24850. The time you are invited to go on the road, was in cases of emergency, you say?—Yes.

24851. A fall of a roof?—Blocking the way.

24852. That would always happen?—That does occur more or less. That is in relation to having to go out at the call of boys and leaving our duties. That is a ground of complaint, and has been more or less. In some instances we have got consideration from the management, and they have stopped it.

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24853. That amounts to this: it is supposed to be a part of your duty to see that the traffic arrangements in the road are kept clear?—Yes.

24854. A message comes to you at the face to say that there is a block in the road?—Yes.

24855. You are required to go out and see that it is removed. That takes you from your proper duties of inspection at the face. You think that you should be relieved from that duty?—Yes.

24856. And that your duty should be confined to the proper duty of inspection?—Yes, unless it is a case of extreme urgency.

24857. You consider that your duties are too great at the present time and too numerous?—Yes.

24858. Do you think that the safety of the men would be better secured if the deputies had less to do? That is what it all means, does it not?—Yes, it is a question of pressure.

24859. You would be prepared to do all the duties you have to do now if you had the time to do them?—We are quite prepared to do them. Take myself, after 31 years, more or less, and the son of an overman who had 35 years' experience, I think I have at least a fair knowledge, and I have read my rules, and the question of safety has been a very important item with me. You have to apply to the overman that you have too much work to do, and sometimes they are not ready to give you redress.

24860. There is no other person in the mine, official or workman, except the deputy, perhaps, to be put in the position to have a right to appeal to the Government inspector against the decision of the management?—No.

24861. Do you think that the deputy should be put in that exceptional position?—I think as deputies that we should have a court of appeal.

24862. You would not extend that right to any other persons employed in the mine?—No. We stand in rather a peculiar position. We have the men on one side and the masters on the other, so that we stand really between. Our duty is to protect life and limb, and that is on one side, and on the other side it is our duty more or less to protect property for the management, so that we stand in a very peculiar position.

24863. The duty of a deputy is so exceptional that you think he ought to be treated exceptionally in that way?—Yes, we think so.

THIRTY-SIXTH DAY.

Thursday, 27th June, 1907.

PRESENT:

Lord MONKSWELL (*Chairman*).

WM. ABRAHAM, Esq., M.P. (Rhondda).
F. L. DAVIS, Esq.
ENOCH EDWARDS, Esq, M.P.
THOMAS RATCLIFFE ELLIS, Esq.
JOHN SCOTT HALDANE, Esq., F.R.S.
ROBERT SMILLIE, Esq.
S. W. HARRIS, Esq. (*Secretary*).

Mr. JOSEPH ENGLISH, called and examined.

Mr. Joseph English.
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24864. (*Chairman.*) I understand you appear here on behalf of the Northumberland Miners' Mutual Confident Association?—Yes.

24865. How many members are there in that association?—26,000, nearly.

24866. Out of a total of the Northumberland miners, of how many—about?—There would be about 33,000 engaged in the mines.

24867. The greater number then of the Northumberland miners belong to this association?—Yes.

24868. What is the object of your association?—A general trades union to look after the safety and protection of the members of the association.

24869. What do you mean by "Mutual Confident Association"?—We combine in a mutual confident association to protect each other, the same as in ordinary trades unions.

24870. You have in your association the very great majority of the Northumberland miners?—Yes.

24871. May we take it that what you tell us to-day is what you have been deputed to say, to a great extent at all events, by your association?—Yes, I am the president of the association, and compensation agent.

24872. I suppose you have had meetings, and you have put before the association what you propose to say, or the gist of it, and therefore you can confidently say that they are of your opinion?—It is not necessary to put it before our members; but they frequently have deputations to the managers in order to try, if possible, to get similar suggestions carried out.

24873-4. You can say from your own personal knowledge that the suggestions you are about to make are suggestions that commend themselves, at all events, to the great majority of the members of your association?—Yes.

24875. I understand you would like to begin with the General Rules you wish to be amended and take them in their order?—Yes, if you would like me to adopt that course of procedure.

24876. I think you would like to begin with General Rule 1, par. 2?—Yes. The Rule at present is: "The quantity of air in the respective splits to be under the control of a certificated manager." We wish it to be altered to read thus: "The quantity of air in the respective splits to be under the control of the official in charge of the split." At the present time it is no one's special duty to see to an adequate supply of air; and our idea is that instead of it only being under the responsibility of the general manager it ought to be the duty of the official in that part of the mine to measure the air.

24877-8. By the "official" in any particular part of the mine, I suppose you mean, for instance, the fireman?—The fore overman, and in the absence of the fore overman would be the back overman.

24879. You want to add on to the second part of General Rule 1 a provision that each split should be separately looked after, either by the fireman or some other competent person?—Either the fireman or the official in charge.

24880. You say some official, at all events, should be deputed to look after each separate split?—Yes; as it stands at present there is no one responsible for the doing of that work.

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Mr. Joseph English.

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24881. You would like that to be added on to the General Rule?—Yes.

24882. You wish to say something on General Rule 4? We work the double shift system, and the inspection takes place in the morning. There are two continuous shifts, the fore shift and back shift, working on an average 7¼ hours each. A place may be inspected in the morning, but if the fore shift man is absent, the place stands 7¼ hours: it is not re-examined, and the back shift man goes in without that place being examined.

24883. If there are two shifts is it not examined for each shift?—If the fore shift is off work there is no more inspection takes place, the back shift man goes in, and where there is gas it many accumulate in the interval.

24884. (*Mr. F. L. Davis.*) How do you mean, if the man is off work? Surely someone must inspect?—The place is examined in the morning, according to this rule, two hours before the workmen enter, but if the fore shift workman does not come out that day, the fireman is not bound to make a second inspection before the back shift man goes in, because it is looked upon as a continuous shift.

24885. He always examines for the first shift?—Yes, but not for the second shift.

24886. Never?—No. A continuous shift means one shift, according to the provisions of this Act.

24887. (*Chairman.*) And you object to that?—Yes.

24888. Is there any other Rule you wish to give evidence about?—The next one is Rule 9 with regard to safety lamps. We think that there ought to be some test with these safety lamps in order to prevent men running risk of getting into stythe which is very injurious to health. By the latest inventions with respect to safety lamps men can work in foul air with these lamps where it is not fit for them to work. I know a case where one man got in with a lamp and he had to crawl out as the air was not fit for a human being to be in. At the present time, with the new safety lamps, it is quite possible for a man to get in without his lamp going out where it is not possible for him to live for any length of time.

24889. Then you think there has been retrogression in the matter of safety lamps, and that the last type of safety lamp is not so safe as the former type?—They are perfectly safe, so far as an explosion is concerned, but with them they can get a man into a place where it is not fit for a man to work.

24890. Then it is not a question entirely of the type of safety lamp?—No.

24891. You merely say that the safety lamp is sometimes in the nature of a trap?—That is so.

24892. People think they are perfectly safe with a safety lamp when they go into a place where they ought not to go into, and where they ought not to work?—Yes.

24893. How would you prevent that?—By having a sort of test with regard to the lamp, to see whether it would be fit for a man to live in a place where these lamps will burn. The Park Lane lamps are all right; but there is a new invention which burns with paraffin oil and a double burner, which is a very good lamp, although I do not know the name of it.

24894. You think that shows gas much more easily than the other lamps?—It detects gas more easily, but it will burn when it is not fit for a man to be in there. My idea is that there ought to be some test with regard to these lamps.

24895. (*Mr. Enoch Edwards.*) Do you mean that the air is foul?—The air is foul and yet the lamp may still burn. There is a disposition to get the places worked, and consequently these lamps are invented. Of course, they are perfectly safe so far as an explosion is concerned; yet it is dangerous to health to work in such places. The consequence is, the men's health suffers a good deal from stythe.

24896. (*Mr. Ratcliffe Ellis.*) What you mean, I think, is that there is no gas to do any harm, but the air is so foul it is not fit for the men to work in it?—Yes, no explosive gas.

24897. Because the lamp does not detect the gas he can work there without knowing it is unsafe?—Yes.

24898. It is perfectly safe, so far as gas is concerned, but the air is not fit for the men to work in?—That is so.

24899. (*Chairman.*) There is a false sense of security, because by the safety lamp sometimes, although the ventilation may be injurious to health, a man may work in it without being aware of that fact?—Yes; it may ensure safety from explosion, but it is injurious to health at the same time.

24900. How would you get over the difficulty?—These lamps should be inspected, and if they render it possible for a man to get in where he ought not to work, then, I think they should be condemned.

24901. (*Mr. Ratcliffe Ellis.*) You want the lamp to indicate not only gas, but foul air, where a man should not work?—Yes.

24902. (*Mr. Wm. Abraham.*) I take it you would stop the use of a lamp that lives in an air which a man ought not to go into?—Yes. I think there ought to be something done in that direction, because the men are injured very much and suffer in their health in consequence.

24903. (*Mr. Enoch Edwards.*) Do you suggest that with another lamp this atmosphere would put the light out?—Yes; the Park Lane lamp would not burn where these would burn.

24904. (*Chairman.*) There are certain lamps which will go out when the atmosphere is foul?—Yes.

24905. You know of those lamps?—Yes.

24906. You think the rule which you suggest should be made compulsory?—Yes.

24907. (*Mr. Smillie.*) Improvements in lamps enable them to work in places where previously a lamp would not burn; consequently, although the lamp burns and shows a good light, the men are being poisoned?—That is it.

24908. (*Chairman.*) You say the later lamps do not give the same indication of an impure atmosphere that some of the other safety lamps used to do?—The point I wish to bring forward is that these lamps can burn in foul air although they may not indicate gas.

24909. That you have said several times, and I quite understand it; but I thought you also said there was a type of lamp you knew of that would show foul air as well as gas?—It would not burn, and so it would indicate the presence of stythe.

24910. It would show foul air as well as gas in some way?—Yes.

24911. You say you know of such a lamp, and the use of that lamp ought to be made compulsory?—Yes.

24912. (*Mr. Wm. Abraham.*) In your opinion that lamp is safer than the newer kinds of safety lamp?—Yes, so far as the health of the men is concerned.

24913. (*Chairman.*) You say that some of these new safety lamps, so far as the health of the miners is concerned, are not so satisfactory as lamps you know of which were used before?—That is so.

24914. What lamps would you prefer?—The Park Lane lamp is a very useful lamp for that purpose.

24915. You suggest that would be a good lamp?—Yes.

24916. Rule 9 would hardly deal with questions of that kind, would it?—I think it would.

24917. That rule is: "Wherever safety lamps are used, they shall be so constructed that they may be safely carried against the air current ordinarily prevailing in that part of the mine in which the lamps are for the time being in use, even though such current should be inflammable." That only deals with gas, and not with foul air. I understand, whether you think the General Rule could be altered or not, at all events you are of opinion that a certain type of lamp ought to be used instead of the type of lamp at present in use; and you have an opinion as to the kind of lamp you would like to see used?—Yes.

24918. What is the next rule you want to call our attention to?—Rule 22, as to timbering. This is very unsatisfactory in our district, and, I think, it is the general complaint right through other districts. The present rule says: "Where the timbering of the working places is done by the workmen employed therein." I need not read any more than that. What we want to insert there is "Where the timbering of the working places is done by the workmen employed therein *in the absence of the deputy.*" Our reason for that is that the deputy many times goes into the places, and he considers he has no right to do it. According to the Act the workman is responsible for setting his own timber, and the deputy simply walks out of the place without setting any timber. According to the Act he is not compelled to do so, and, therefore, we wish those words inserted.

24919. Making it necessary that it shall be the duty of the deputy to see that proper timbering is done?—It shall be the duty of the deputy to properly secure the place, and in his absence the workmen to be responsible for the timbering of the place.

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24920. You say it should be the duty of the deputy to do this, and he is to be made responsible for it by Act of Parliament ?—Yes.

24921. (*Mr. F. L. Davis.*) This rule applies to the whole of the coal trade. We do not know what "deputies" are in our part of the world, where we have a different custom altogether. The men do not have anyone to do the timbering for them, so that if you put it in this rule we shall get thoroughly mixed up ?—I follow that.

24922. (*Chairman.*) Do you mean that now the deputies contend they are not responsible for putting up the timber, but that it is the duty of the workmen ?—Yes.

24923. I thought the deputies were responsible in Northumberland for putting up the timber ?—But the present Act does not make them responsible.

24924. It does not make them unresponsible if they undertake the duty. Surely if they undertake the duty they are responsible ?—The whole of the responsibility, according to the present Rule, falls on the workmen. There is nothing in there to put the responsibility on the deputy.

24925. (*Mr. Ratcliffe Ellis.*) In Northumberland ?—Yes, even in Northumberland.

24926. Special Rule 46 does not conflict with anything in the Act of Parliament, and it is perfectly binding: "Each deputy shall be responsible for having ready and putting into or near to every working place under his charge a sufficient quantity of suitable timber," and they shall report any deficiency ?—Yes, that is placing the timber in a position where it can be got by workmen.

24927. "and (except as provided in Rule 92) for setting sufficient timber to afford the greatest possible safety to the workmen employed." If there is a rule to say the deputy is responsible, surely he is responsible ?—There is nothing in the Act of Parliament that I can see to contravene that —the term "deputy" is not in the Act of Parliament. We want it inserted in the Act that the deputy is responsible.

24928. (*Mr. Ratcliffe Ellis.*) General Rule 21 is: "The roof and sides of every travelling road and working place shall be made secure." Rule 22 says: "Where the timbering of the working places is done by the workmen employed therein, suitable timber shall be provided at the working place." In Northumberland the Special Rule says that the deputy is to do the same thing ?—We want to put in the words "by the workmen in the absence of the deputy."

24929. (*Mr. Wm. Abraham.*) It is a different system altogether, and they want the deputy to be made responsible in the general Act ?—If you look at the Special Rules you will see they may apply to some particular colliery.

24930. (*Mr. Ratcliffe Ellis.*) Those Special Rules apply all over Northumberland ?—No; different collieries have different Special Rules.

24931. Do I understand that Special Rule 46 is what you want in the Act ?—Yes.

24932. Supposing it was made general, it would meet your wishes ?—Yes.

24933. (*Mr. Smillie.*) It would be as well to look at the rules. Rule 46 is: "Each deputy shall be responsible for having ready and putting into or near to every working place under his charge a sufficient quantity of suitable timber, brattice, sprags, and other materials; and (except as provided in Rule 92) for setting sufficient timber to afford the greatest possible safety to the workmen employed, and he shall report any deficiency of timber, brattice, sprags or other materials, to the overman or back overman." Then Rule 92 is: "Should the working place of any man or boy become unsafe, from any cause, he shall discontinue working in it, and immediately send or go for the deputy; but if unsafe from want of timber being set, then, in the absence of the deputy, there being sufficient timber of proper lengths in or near to the place, he shall set it, in order to keep himself safe, or shall cease to work and retire therefrom, and report the same to the deputy or other official; and in all cases where necessary, he shall sprag his jud." You want that to be of general application ?—Yes. In Northumberland—and I take it the same thing applies to other counties—each colliery has Special Rules, and the consequence is that there is no one responsible for the timbering. They place the whole of the responsibility upon the workmen, and we want that responsibility removed from the workmen.

24934. (*Chairman.*) Do you want to say anything more about that rule ?—I think that is all.

24935. What is the next rule you want to give evidence upon ?—The next rule I want to speak about is No. 34. "Where persons are employed underground, ambulances or stretchers, with splints and bandages, shall be kept at the mine ready for immediate use in case of accident." We wish that to be amended, and to read that they should be kept at the face or at the deputy's chest. R 34

24936. Where they would be more handy ?—Yes. The working place may be a mile and a half or two miles in, and the injured persons have to be brought to bank before they are able to obtain relief by the use of splints or stretchers, carbolic oil, or anything of that sort. A man may almost bleed to death before he gets to bank.

24937. Have you any form of words which you wish to be inserted in the rule in order to carry that out ?—That stretchers, splints, bandages, carbolic oil, &c., should be placed in and be kept in the deputy's chest. ✓

24938. In every deputy's chest ?—Yes. It is done in many mines now. I also think that a deputy should pass the First Aid examination, and have a First Aid ambulance certificate. ✓

24939. Have you anything else you wish to say in respect to that rule ?—No.

24940. Have you anything to say in respect to Rule 38 as to the inspection by workmen ?—Yes. At the present time the workmen may appoint two of their number, accompanied by an official, if the manager thinks fit to inspect the mine. This inspection periodically by the workmen, I think, is one of the best means of preventing accidents we possibly can have; but it is left entirely to the option of the manager whether he will allow any of the officials to accompany the workmen. We contend that there ought to be one of the officials specially provided for by the Act to accompany the workmen's inspectors when they are inspecting the mine. R 38 ✓

24941. Have you known cases where the workmen's inspectors have gone over a mine and have not been able to get an official of the mine to go with them ?—I do not think I could mention such a case, but there is that option on the part of the management.

24942. You think that ought to be done away with ?——Yes.

24943. That the management should be obliged to provide some sort of official to go round with the men ?—Yes.

24944. Would you say it should be either the manager or sub-manager ?—One of the officials.

24945. Is that the only suggestion you have to make as to Rule 38 ?—Yes.

24946. Have you anything to say as to Rule 39 ?—Yes. At the present time a man is not allowed to work alone as a coal or ironstone getter unless he has been two years in or about the face. The man who has just commenced in the pit can go into the face and do any other work, but he cannot be a coal or ironstone getter. However, it frequently happens that he may be set to timbering work by himself, and we have had various accidents occur to men who have been inexperienced going to work in these places by themselves. We think no one should be left to work by himself unless he has been two years in and about the face. R 39 ✓

24947. You think it should not be restricted to coal getting; but he should not be allowed to work at the face, or anywhere ? Do you mean that ?—In the face.

24948. That is, he should not be allowed to put up timber, or do anything at the face ?—That is right. ✓

24949. Should he not attend to loading the trams, or anything of that sort ?—Yes, of course we make that exception—that is, the hauliers.

24950. (*Mr. Ratcliffe Ellis.*) Do you apply it to hewers and say that no hewer should be employed at the face unless under those circumstances ?—It applies to hewers now, but we want it extended.

24951. To what other men ?—Shifters, wastemen, and stonemen, and any other class of man who has to work in the face. ✓

24952. Independent of the hewer ?—Some have to take down stone, renew timber, &c.

24953. Do you say he should not be employed at all unless he has been engaged in that particular work for a year. ?—Not alone—that he should be accompanied by some other workman until he becomes experienced.

24954. One man in the gang should always have that experience ?—One man working with them.

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24955. If there was one man of experience would you limit the number of the gang?—Provided he had someone with him who had the experience.

24956. (*Chairman.*) Would you be inclined to limit the number of unskilled workmen who might work under the supervision of a skilled workman, or would you allow 10 or 12 unskilled men at the face to work under the supervision of only one skilled man?—I do not think I would.

24957. How many would you say? Would you say two, or not more than one, ought to work under the supervision of a skilled man?—The present Act has worked very well with regard to the coal-getter, and I do not see why it should not work very well with regard to the other class of men, if applied to them.

24958. You could not have more than two or three men at work at the face at the kind of work to which you refer?—No.

24959. (*Mr. Enoch Edwards.*) You could not have 10 or 12 men working at the goaf, for instance?—No.

24960. (*Mr. Wm. Abraham.*) Your point is, as I understand it, that no unskilled man should be allowed to work alone at anything?—Yes.

24961. (*Chairman.*) That is to say, every unskilled man must be under the immediate supervision, within a very few yards of a competent workman?—Yes.

24962. So that that would in itself limit the numbers?—Yes.

24963. Would that be a sufficient limitation to the numbers, or would you be inclined to add that not more than three or four unskilled workmen should work unless under the supervision of a skilled workman?—I do not think it is necessary to specify any numbers.

24964. Is there anything else you want to mention with regard to that?—Not with regard to that part, but I have something to say with regard to coal-cutting by machinery. Machines for coal cutting are being largely introduced now into the North of England. Mr. Straker and I happened to be appointed on a committee to make special inspections and enquiries with regard to the working of these coal-cutting machines, and we found that the sparks emanating from these electric machines would be very dangerous where there is gas to be found. Where the electric coal-cutting machines give sparks they ought to be condemned.

24965. (*Chairman.*) Have you anything to say about the increasing danger from coal dust owing to the use of machinery? It has been put before us that some coal-cutting machines produce finer and more explosive dust, and in greater quantities than the ordinary method?—The Northumberland coal does not give off much dust; it is not of a gassy nature, and it is hard, and therefore there is not so much dust from it. I do not know what they do in other districts. With regard to these machines working, there is a suggestion we have which ought to be attended to, I think. When they are continuously working the machines it is impossible for the men with them to pay sufficient attention to the stone and the nature of the strata, because there is such a terrible noise coming from these machines. A man cannot hear if the stone is "working," and I think that they ought to be stopped two minutes in every quarter of an hour in order that the men working at the machines might examine the roof.

24966. You would have a rule laid down to that effect?—Yes, to have them stopped, in order that the men may have sufficient time to examine the roof and keep themselves safe.

24967. Do falls of roof and side occur very often?—We have had various accidents since the machines were introduced. There is not much fear of the sides: it is the roof.

24968. You consider from your experience that falls of roof are more frequent if coal-cutting machinery is introduced?—Yes, but there could be that prevention.

24969. With that prevention you think it might be safely done?—Yes.

24970. To what extent are coal-cutting machines used in your county?—I think we have 25 or 30 machines in Northumberland now.

24971. Altogether, do you mean?—Yes.

24972. Or do you mean the mines with which you are acquainted?—Yes.

24973. Which do you mean, in the whole of the county, or the mines with which you are acquainted?—In Northumberland.

24974. About 25 machines?—Twenty-five or 30.

24975. (*Mr. F. L. Davis.*) That is a very small number? But a few years ago we had none.

24976. (*Mr. Wm. Abraham.*) Perhaps a description of these things would enlighten us on the matter. Will you kindly describe to us how these machines are fastened in order to put them to work at the face?—They are not fast: they run along the face, and we had an accident just a few months ago, where a man was killed, and there was no one near. They could not hear him through the machine continuously working.

24976A. (*Mr. Ratcliffe Ellis.*) The noise caused by the machine prevented his being heard?—Yes.

24977. (*Chairman.*) You say that with the use of 25 machines in Northumberland the number of accidents has considerably increased?—Yes, and they may extend. The company I worked for just previously—I have just been appointed president of the Northumberland Miners—10 years ago did not know what a machine was. Now they have about six, and they are making preparations to have more.

24978. Have you had an extensive experience quite lately? Have you worked underground at all quite lately yourself?—About three months ago I ceased.

24979. Have you worked in many mines in Northumberland?—I have worked in two. I have worked about 30 years or 35 years, but I have only been in two mines.

24980. You have seen these coal cutting machines in use yourself?—Yes, on the Committee of Enquiry we saw the whole of them in Northumberland working.

24981. (*Mr. Enoch Edwards.*) They are working thin seams?—Yes: there are some you could not work unless it was by a machine.

24982-3. (*Chairman.*) It seems on the whole that falls of roof and sides at the working face have gone down in the Newcastle district?—Accidents in the Newcastle district, according to the returns, have increased slightly during the last 12 months.

24984. The death rates from accidents through falls of ground at the working face for every 10,000 persons employed underground were .47 in 1901, in 1902 .32, in 1903 .39, in 1904 .46, and in 1905 .40, so that 1901 was the worst year. The average of the last five years is .41, and the average of the five years before is .50?—We get a pretty fair idea from our Association returns of the number of accidents caused. I think it is a better gauge than that.

24985. (*Mr. Enoch Edwards.*) You cover all men employed in the pit, and you pay for all accidents?—Yes.

24986. (*Mr. Ratcliffe Ellis.*) Have you mentioned all the points in which you wish amendments to either the Act of Parliament or the General Rules?—No; there are others, if I am not detaining you too much. There is a point with regard to the back shafts. There are two shafts to every mine. We wish to have the back shafts fitted up with proper appliances and winding gear to be used in the case of accidents. At the present time they have only the one shaft fitted up so that they can draw men, and should an accident occur in that particular shaft the men have to remain down in the mine or travel to an adjoining pit, if there is one. We have had one where the men had to travel almost two miles underground to get to another shaft belonging to the same company. If we had the back shaft fitted with winding gear we could have drawn up the men there.

24987. (*Chairman.*) You must have always two means of exit from a mine close to one another. In this back shaft there ought to be appliances for getting the men up speedily. That is what you think?—Yes. It would not entail a great deal of cost, and it would be there in readiness.

24988. (*Dr. Haldane.*) Is there any means at all of getting up these back shafts?—None whatever, only the return airway. They are bound to have two shafts in our mines, upcast and downcast, and there is no machinery whatever in the back shaft.

28989. (*Mr. Enoch Edwards.*) Is that general throughout Northumberland?—Yes.

24990. The back shaft is the upcast?—Yes.

24991. (*Chairman.*) In the Coal Mines Regulation Act section 16, sub-section 1, paragraph (a) it is provided that "There must be at least two shafts or outlets, with which every seam for the time being at work in the mine shall have a communication, so that such shafts or outlets shall afford separate means of ingress and egress available to the persons employed in every such seam, whether the shafts

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or outlets belong to the same mine or to more than one mine." Then paragraph (c) says; "Proper apparatus for raising and lowering persons at each such shaft or outlet shall be kept on the works belonging to the mine: and such apparatus if not in actual use at the shafts or outlets shall be continually available or use." Is that so?—No, it is not done. Would you read that again—"such apparatus to be kept—"

24992. "Proper apparatus for raising and lowering persons at each such shaft or outlet shall be kept on the works belonging to the mine." "Each," that is to both back shaft as well as the other shaft?—It is not done.

24993. (*Mr. Ratcliffe Ellis.*) How do you carry out that Rule at your own colliery?—I have never seen any apparatus yet. At some places they may have a gin rope where they draw one man at a time.

24994. (*Chairman.*) Have you ever called the attention of the Mines Inspector to the want of proper apparatus for raising and lowering men in these back shafts?—We have not. It is a very difficult matter, and if we can manage without going to the Government Inspector we do: we never care about going to the Government Inspector if we can possibly avoid it.

24995-6. If you have these back shafts without any apparatus for raising or lowering the men, that seems to me to be an infringement of the Act?—Taking the Act as it is worded, it is so vague that even if they had a "jack-roll" there to be in readiness, that would bring them within the Act. They may have a horse or a crab or something like that.

24997. It seems to me that the spirit of the Act of Parliament is at all events infringed?—That is not an uncommon thing

24998. It seems to me that there is a good case for seeing that the provisions of the law are complied with at the present time?—I am for making the provisions more clear.

24999. (*Mr. F. L. Davis.*) Do they never raise the coal from the upcast shaft?—Very seldom.

25000. (*Chairman.*) It is a pity when you find that the spirit of an act of Parliament is not being carried into effect properly that you should not mention these things to the Government Inspector. Why should you object?—Our idea is to have them so worded in an Act of Parliament that they cannot possibly get out of them.

25001-3. I should have thought that it was a clear infringement of the Act, and that if you went to the inspector and the inspector went to the Home Office it would be put right. It seems clear to me that according to the spirit of the Act the mineowner is under the obligation to furnish special apparatus for raising and lowering the men?—Yes.

25004. Is there anything else you wish to say?—I want to say something about the winding engine-men. We wish that this particular class of labour should go through a medical examination at least once in six months. There was a case where the poor fellow only had time and the presence of mind before he dropped to shut the steam off and avoid an accident. Where there are so many lives under the charge of an engine-man, we think that he ought to be medically examined once in six months, to see if he is fit for those duties.

25005. It is also suggested in some quarters that he ought to have a certificate of competency. Have you anything to say with regard to that?—I do not know that I can say anything so far as the engine-man is concerned, but he certainly ought to be medically examined after he is there.

25006. Is there anything else that you wish to say?—I wish to say something with regard to the travelling ways down the mine. We had an accident twelve months ago where there was no travelling way, only the refuge holes, and we considered that there ought to be travelling ways by the side of the haulage road. There is no difficulty, and if that were done many accidents would be avoided.

25007. Travelling ways when they are made should be kept clear throughout the whole length?—Yes.

25008. On one side?—Yes, they do that at some of the pits, but there are some where they have not these ways.

25009. It has been suggested to us where you have mechanical haulage and two trams may pass one another on the same haulage road, that instead of having a gangway at the side, you ought to have a gangway in the middle sufficiently wide to make it safe for a man to stand in the middle while those two sets of trams go by?—I do not think that would be very convenient or even practicable If I had a suggestion to make, I think there ought to be a way entirely from the haulage road to the travelling roads, but there is no difficulty to make one alongside of the haulage road. That could be easily done and would avoid many accidents.

25010. (*Dr. Haldane.*) What is your objection to a travelling way in the middle between the rails?—I think it would be more dangerous than by the side. If by the side, it could be fenced off, but in the middle that could not be done. In the middle you have two sets to contend with; on either side you have only one.

25011. (*Mr. Smillie.*) Supposing a person has a full train of trams to go out and he is standing on the inside of the rails, between the two sets of rails, and a train of empty trams comes in, he has no room to get between?—No; if at the side it would be better. There is frequently a protection by fencing for these men who have the trams to attend to: they are generally protected by fences.

25012. It is common to have a sufficient width between two rails at a pass-by so that a person could stand between?—Yes, so far as a pass-by is concerned.

25013. (*Chairman.*) You would not have it throughout the whole length of the haulage road?—Right from the shaft to the face.

25014. (*Mr. Smillie.*) The travelling road along the side?—Yes.

25015. (*Chairman.*) Not along the middle, except at certain points possibly?—Yes. There is another question which men think very much about in Northumberland, and that is, with regard to detaching hooks and safety catches on cages.

25016. Before we leave the haulage roads, are you in favour of trailers or something to stop the trams, supposing they should get detached and run away?—I do not think you need make provision for that on the haulage roads.

25017. You have stops of various kinds, stops and catches to prevent runaway trams doing damage?—They have switches the same as on the railways which stop the trams for the men.

25018. You are satisfied with what is done with regard to that?—Yes.

25019. You want to say something about cages?—The detaching hooks and the safety catches we think are very important. That is for overwinding and breakage of ropes, to hinder the cage going back into the pit. They have been largely introduced in Northumberland and there is a Special Rule on that point, No. 26: "If in any mine the winding apparatus is not provided with some automatic contrivance to prevent overwinding, then the cage, when men are being raised, shall not be wound up at a speed exceeding three miles an hour, after the cage has reached a point in the shaft to be fixed by the Special Rules."

25020. If overwinding is absolutely prevented you need not have these detaching hooks, because they only come into operation if it takes place?—It is the detaching hooks that prevent overwinding. As soon as the cage goes up the rope leaves the cage hanging.

25021. I understand that there are contrivances which some people think better than these detaching hooks, which prevent the cage going up a certain distance?—So much the better if you only make it compulsory.

25022. (*Mr. F. L. Davis.*) Do you mean safety catches in the middle of the pit?—Anywhere in the shaft.

25023. If the rope breaks?—Yes.

25024-5. (*Dr. Haldane.*) Are there usually wooden guides in Northumberland?—Yes. With regard to timbering we wish, whether the place is safe or unsafe, that timbering should be only a certain distance from the face, and not above 4 ft. Most of the accidents that occur are through places being considered safe by the men because they neglect to put the timber in. There should be a uniform distance. Of course each county has different Special Rules, and some have one distance and some another, but we think in Northumberland that if there were a specified distance that in all probability a lot of accidents that are caused could be avoided by that special distance being uniform.

25026. Would you have a system of timbering outside the faces along the roads?—I could not suggest anything there, but in the face there should be some provision made that it should not be more than 4ft. from the face.

25027. A maximum of 4 ft.?—Yes.

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25028. Is there anything else that you wish to say?—No.

25029. (*Mr. F. L. Davis.*) Is that the supply of timber? No, the timber put up. There is another point, the running planks in the face. They have a system in France where there is a running plank driven in to the top of the coal, and when the coal is worked it protects the stone. In a hard seam, when a big shot has been put in, the shot shatters the stone, and, as soon as the coal gets out, down comes the stone. Various accidents are caused in that way. In France they have a steel bar six feet in length on each side of the barrow-way, and the end notched into the coal. I think that is very necessary.

25030. (*Mr. Ratcliffe Ellis.*) With regard to the second paragraph of General Rule 1, that requires "In the case of mines required by this Act to be under the control of a certificated manager, the quantity of air in the respective splits or currents shall at least once in every month"?—Yes.

25031. Do you think that is often enough?—Yes, providing it is properly attended to.

25032. The only alteration you suggest is, that it should specify who is to make the measurement?—Yes, and who is to be responsible for the measurement.

25033. The certificated manager is responsible?—Yes, but we consider that he ought not to be responsible, but that the overman, or the official in charge, should be responsible.

25034. Do you really mean that you would relieve him from responsibility in this important matter, and depute it to an overman?—Do you mean to relieve the general certificated manager from his responsibility and place it upon the overman?—You could not relieve the general manager of the general responsibility of the mine, but I am afraid that there is too much put on the general manager and not sufficient on the under-managers.

25035. Would you relieve him or make both of them responsible?—I would make both of them responsible.

25036-8. Who is the man you would make primarily responsible for this duty?—The overman in the mine every day. It ought to be his duty to make the measurement.

25039. You say the overman ought to be primarily responsible for the examination and the measurement of the air?—Yes.

25040. As it is now, it is under the control of the certificated manager?—Yes.

25041. He can do it himself or appoint anybody else to do it. Would you prevent him having that right, and say that the only man entitled to do this should be the overman?—The back overman or the fore overman.

25042. He is a less responsible man than the under-manager?—Yes.

25043. Is your idea that no other person shall be appointed by the certificated manager to do this except this overman?—Yes.

25044. Do you think that would be right?—I think so. I think the responsibility ought to come on the overman.

25045. You would make this man examine it and no one else?—With the under-manager of course. You should make both parties responsible.

25046. There are two men to be made responsible, the overman and the under-manager?—Yes.

25047. The certificated manager could do not it himself, if he wished?—How do you mean?

25048. You say this is the person to be appointed to make this measurement and nobody else?—To be responsible for the measurement—to be responsible for the quantity of air.

25049. Is he to measure it himself?—Not necessarily.

25050. The certificated manager is responsible. You want to make somebody else responsible as well as the certificated manager. Is it the man who is to measure it whom you want to make the responsible man?—The back overman is in the pit in the b ck shaft. The possibility is that the under-manager is not in the pit at all.

25051. Is it the overman you propose to say must be the person to make the measurement?—Yes.

25052. And he alone?—Yes.

25053. Do you think that that is an arrangement conducive to safety?—Yes, I think it is a better arrangement than the present one.

25054. (*Mr. Enoch Edwards.*) Does he do it now at all?—No. The certificated manager can depute his work to the overman. The overman may do it, but he is not obliged to do it.

25055. (*Dr. Haldane.*) I think in your evidence it was not the actual measuring of the air that you wanted the overman to do, but to have control over the regulators so as to be able to alter the air regulators if there was not enough air?—Yes, if there was not enough in one district he could take it from one district and put it into another. We want the overman to be entirely responsible for the airing of the mine.

25056. (*Mr. Ratcliffe Ellis.*) Do you think it would be safe to allow an overman to regulate the air as he thought fit, independent of the manager?—I do. I think the manager in many cases is very seldom where he ought to be.

25057. We agree that ventilation is the most important part in connection with the management of the mine. Do you agree that it is the most important consideration for the safety of the men that the ventilation should be properly conducted and adequate?—I do not quite understand that.

25058. You would probably agree with me that the regulation of the ventilation is perhaps the most important point to be attended to in connection with the safety of the men working in the mine?—Yes.

25059. Would you place that under the contral of an overman who is a sort of fireman, independent of the certificated manager of the mine?—I would, entirely.

25060. (*Mr. Wm. Abraham.*) You do not mean to lessen in any way the responsibility of the manager, but because he is not always there you think that a man who is always there should be made responsible also?—Yes.

25061. (*Mr. Ratcliffe Ellis.*) Supposing an overman does this and there is an accident, would you make the manager still responsible for that?—Conjointly with the overman.

25062. If you take from the manager his control and give the right to the overman by Act of Parliament to alter this ventilation, and if there is a mishap in consequence, would you still hold the manager responsible?—Yes.

25063. (*Chairman.*) I imagine that an overman must necessarily be under the orders of the manager, and if the manager gave him certain orders as to ventilation he would be bound to carry them out?—Yes.

25064. (*Mr. Ratcliffe Ellis.*) That is exactly the position now. He says, to the exclusion of the manager altogether, he would place in the hands of the overman the right and duty of regulating the ventilation?—There are various responsibilities placed upon other officials, such as deputies, what we call firemen, and master wastemen, and other officials, although the manager is generally responsible.

25065. It is the manager who places that responsibility upon them?—Yes.

25066. (*Chairman.*) Would you absolutely prevent the manager having power to give orders as to the ventilation to an overman?—You could not do that.

25067. (*Mr. Smillie.*) You do not propose doing that?—No. I may say this: according to this Act there is nobody responsible for the measurement of the air. It is nobody's duty to measure the air according to the Coal Mines Act. We want it to be somebody's duty to measure the air.

25068. *Mr. Smillie.*) Not only to measure it, but to see that the ventilation is kept?—Yes.

25069. (*Mr. Ratcliffe Ellis.*) At present this is the position: the certificated manager is required to be there in daily supervision and control by the Act of Parliament. He has to depute such duties as he may consider he may safely depute to other officials, amongst others the overmen. At the present time he can authorise him, if he thinks fit, to measure the air, or measure it himself. Do you want to alter that state of things and say, whether the overman gets instruction or does not, he must have an unfettered discretion by Act of Parliament to alter and regulate the ventilation as he thinks fit?—We want to say by Act of Parliament that it is the duty of the overman to measure the air.

25070. Only measure the air?—Yes, and be responsible for the proper airing of the mine.

25071. That is, to regulate the ventilation?—Yes.

25072. If, by Act of Parliament, you put it on the overman, are you going to relieve the manager from responsibility?—They must take the responsibility jointly.

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25073. At the present time they have got it jointly. The certificated manager is primarily responsible. If he appoints a competent person and that competent person does not do it, they may both be responsible? Do you want to alter that state of things?—We want to say that it is the duty of the overman to do it.

25074. I do not see how you can say that without lessening the responsibility of the manager.

(*Mr. Enoch Edwards.*) He says, I want to suggest to this Commission some way by which it shall be done.

(*Mr. Ratcliffe Ellis.*) What is not done?

(*Mr. Enoch Edwards.*) The measuring of the air.

25075. (*Mr. Ratcliffe Ellis.*) You say it is not measured once a month?—We have no record—it may have been.

25076. At the colliery you worked in before you ceased work, was there no measurement of the air taken at least once a month?—We did not see a record.

25077. What colliery did you work at?—Ashington.

25078. In the Special Rules with regard to the duties of an overman it says: "He shall examine daily the report books kept in the mine and see that the reports are properly recorded, and shall report the results of his observations each day to the manager or under-manager." This inspection of the air has to be reported. Do you not know when an inspector visits a mine, the first thing he looks at is the report book?—I do not know that. He so seldom comes.

25079. Do you say seriously that at the colliery where you are engaged this Rule was not complied with, that the air was not measured at least once a month?—I would not say that, but I have sufficient reason for saying that these reports are not properly recorded.

25080. What is your reason?—I have seen the deputies reports frequently.

25081. Have you seen the report book in which this should be reported?—No, but I have seen the deputy's report book.

25082. Then I think you should hardly make a charge like that. Have you ever seen the deputy's book in which the air was not properly recorded?—That air is not recorded.

25083. The measurement of the air?—It is not recorded in the deputy's book.

25084. What book is it recorded in?—In a book kept on purpose for that business in the colliery office.

25085. How do you know that?—According to the Act.

25086. Not that you have seen it?—No.

25087. The Act requires that it is to be recorded?—Yes.

25088. Have you any reason to say that it has not been recorded?—I am not saying it has not been recorded. I am only referring to the reports of the deputies.

25089. What reports have you seen that give you reason to believe that the report as to the measurement of air is not complete?—I have seen "In good order" where during the day the men have had to come out for want of air. I have seen the deputy's book saying it is all in good order.

25090. Do you think that all the books about the colliery are kept in that way? That is the only reason you have for saying that?—It is, really.

25091-2. What is the lamp that was used at your colliery—the one you worked at last?—There was a new introduction. I do not know the name of it; probably you will be aware which one it is; it has a double burner. The lamps I have been accustomed to—I have not seen any until just now—only had a single burner, and that burns with paraffin oil.

25093. It was supposed to be an improvement on the other, and would detect gas much sooner?—It detects gas quicker.

25094. If there was such a state of things as you suggest in a mine, and the air was so foul that although the lamp burned it injured the men's health, would you consider that sufficient compliance with General Rule 1, as to ventilation?—I would not.

25095. Have you known of a case of that sort?—As far as the ventilation in concerned you may have an adequate amount of ventilation one day, and according to atmospheric pressure the next day it may be just as bad.

25096. Have you known a case in which men worked in an atmosphere where they ought not to work?—Yes, scores of cases.

25097. Have you ever worked in it yourself?—Yes.

25098. Did you complain either to the Mines Inspector or the management as to the condition of things?—I would not say once, but scores of times. We had a case last month.

25099. Have you ever complained to the Mines Inspector about it?—No.

25100. Why?—Because the next day I would get notice, and I would have to go somewhere else and get work.

25101. You know that the Mines Inspectors receive anonymous complaints?—But the management find it out in some way or other. I knew one trade unionist who made application for the Government Inspector to come to our colliery, and he never got another day's work after.

25102. You have never made any complaint yourself?—No.

25103. As to the ambulance, everybody wishes that it should be kept at some place where it could be most conveniently got at. It is only a question of keeping it safely. Do you think the chest of the deputy would be the best place to keep it?—Yes.

25104. What is kept in the chest?—The implements for the work of the deputy, but if one chest was not big enough they could have two.

25105. It is rather the locality for it to be kept. It should be kept at the most convenient place to get at it?—Yes.

25106. Where is it kept now, on the surface?—Yes.

25107. It is important that when wanted it should be in proper order?—Yes.

25108. If a place can be suggested down the mine where it can be kept safely, that would be an advantage?—Yes, and especially with regard to bandages and splints.

25109. Those want keeping in good order?—Yes.

25110. As to the first-class ambulance certificate for deputies, have the deputies in your district generally got second-class certificates?—Some of them. Some pay attention to that, and others do not.

25111. Do you suggest that they should all have a certificate of some kind?—Yes.

25112. A certificate of competency for their work?—Of course it is rarely necessary to have a certificate of competency, but more so with regard to ambulance.

25113. With reference to inspection work and the work which the deputy has to do for safety to prevent these accidents?—Yes.

25114. Would a second-class certificate meet your view?—Yes, I think so.

25115. In addition to that, you think that he should have an ambulance certificate. Is there plenty of opportunity in your district to be taught ambulance work?—Yes.

25116. There is no difficulty in getting instruction in order to get a certificate?—No, we have these classes all over the district.

25117. I did not understand what you want with reference to Rule 39. The hewer at the present time must learn the work of getting coal before he can work alone at the face?—Yes.

25118. What is the work of the brusher in your district?—The brusher shoots the canch—what we call the canch; I do not know what you call it.

25119. The entrance to the working face, if it is not high enough, he makes it high enough?—Yes, and he is responsible for timbering the sides.

25120. You say that a man should not be employed in that work unless he has had experience for how long?—Two years, the same as the hewer.

25121. Employed in that work alone?—Yes.

25122. Supposing a man has been employed as a hewer, would you allow him to work as a brusher?—We make provision—if he has been two years in and about the face

25123. I will take a man who has to work in the roadways; if he has worked in the face would you allow him to work in the roadways?—Yes.

25124. If he has worked in the roadways would you allow him to work in the face, timbering?—In a case of

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that description you could not prevent him being engaged, if at the same class of work two years.

25125. In the mine ?—Yes.

25126. Do you think that this might lessen the available labour in mines ?—No, I do not think so.

25127. You think that there are plenty of people sufficiently equipped for this purpose who have had this experience ?—There is plenty of work in the mine : if a stranger comes to commence work he could be set with an experienced man for the time it would take to get proper experience.

25128. You suggest this on the ground of safety ?—Yes.

25129. If it turns out, when we come to examine the statistics, that there is not any evidence of accidents from this condition of things, that might alter your view ?—Yes, if you could prove that. I am speaking from practical experience, and I do not know what statistics say on this point.

25130. It is because you think it would be safer if that method were adopted ?—Yes.

25131. As to Rule 38, why do you suggest that the employer should send a man round with the Inspectors ?—Of course you have an idea when you are in a coal mine yourself. I may be working in one district this three months, and in all probability the next three months I may be appointed by a fellow workman to be an inspector. It is optional whether the management have one colliery official to go round with me as an inspector. What use would I be going into a part of the pit where I had no idea as to the roads in and out ?

25132. This is an inspection for your satisfaction ?—Yes.

25133. You would go where you thought fit. If you had any intimation from any of the men that some particular place wanted looking at, you would look at it Why should the employer be bound to send someone to show you round the pit ?—Because I would be no use by myself. I would not know the way.

25134. How do you manage now ?—The manager sends an official continually.

25135. You want to make it compulsory that he shall ?—Yes.

25136. Have you ever had cases where he refused to give facilities ?—No.

25137. This inspection in your county is pretty general ?—Yes.

25138. You have never had a case in which you have had any difficulty ?—We want to make protection should it ever occur. What use would the Government Inspector be going to a mine if there was not someone to take him round ?

25139. With regard to coal cutting machines, are you in favour of introducing machinery into mines ?—I am, certainly.

25140. You do approve it ?—I am a great advocate of it.

25141. This stoppage would, of course, lessen the work the machine would do in a certain time ?—Yes, to the tune of two minutes in every quarter of an hour.

25142. Not more than that ?—No.

25143. Have you seen the Electricity Rules which have been established ?—I do not think there are any, are there ?

25144. Yes, there are a large number of them.—Are they drawn up by the owners ?

25145. No, by the Government. You have not seen them ?—No.

25146. Have you worked after a machine yourself ?—No.

25147. Have you seen one at work ?—Yes.

25148. There is a great noise ?—Yes.

25149. You think that the noise is so great that you cannot hear the indications which would give you notice that the roof was getting a bit uncertain ?—Yes, that is evident.

25150. You think a stoppage for a few minutes during the course of the hour would be safer for that purpose ?—Yes. One man has to timber before the machine, and he goes on before the machine, and the machine follows him up. That man cannot hear anything.

25151. (*Mr. Smillie.*) Is he not taking out timber ?—There is a man taking out and putting in.

25152. (*Mr. Ratcliffe Ellis.*) I was under the impression that there was a rule to that effect now ?—There is none for machinery at all.

25153. I know it was discussed, and I was under the impression that there was a rule of that sort. With reference to sparking, if the motor is enclosed does it spark then ?—The one I saw was at Beckworth. I do not know whether it was the Yankee. I forget the name, but I could almost have lighted my pipe by the sparks coming from that.

25154. We quite agree, in a fiery mine that would not be safe. You are speaking of use in a fiery mine where there is any danger of gas. You do not know whether they have overcome that difficulty by enclosing the motor ?—I do not know.

25155. You think the sparking could be prevented ?—Yes ; it was just what I saw at the particular time.

25156. With regard to the engine-winders being examined, have you spoken to any engine-winders about this ?—To any men ?

25157. Yes.—No.

25158. What do they think about this ?—If they were strong men they would think nothing about it, and if they were weak men they ought not to be there.

25159. There are people who do not like a medical examination. Even a strong man might not like a medical examination ?—If in a responsible position like that they ought to be subjected to one.

25160. What do you examine for ?—A weak heart.

25161. Anything else ?—I do not know. Anything that might make him incapable of performing his duties. There are various diseases that a man might have which would make him incapable.

25162. Would you make it compulsory on the mines inspector to see that the man was examined every six months ?—Yes.

25163. What would you prescribe as to the conditions under which he should cease to be employed ?—I would place the responsibility on someone.

25164. You would have to give the doctor some instructions, because it would be decided on the doctor's certificate whether the man was continued or discharged ?—Yes.

(*Mr. Wm. Abraham.*) That is a question of detail.

25165. (*Mr. Ratcliffe Ellis.*) Yes, it is a very important detail, I think. Would you say upon a doctor's certificate that this man's services should be discontinued or continued ?—That would be the only guide we could get.

25166. What doctor do you suggest should examine the man ?—Some official. That would be a provision for you to make.

25167. You merely suggest examining him medically once in six months ?—Yes.

25168. (*Mr. Smillie.*) Would you give him the right of appeal to another medical man ?—Yes. Why should he not undergo an examination the same as anybody else ?

25169. Mr. Ellis's point is this, and it is an important question to enginemen. He agrees with you that if he is in such a weak state he should not be there, but if he is examined by someone, would you give him the right to appeal to someone else ?—Yes, we could not prevent him.

25170. (*Mr. Ratcliffe Ellis.*) I wondered if you had talked it over with the enginemen before making the suggestion ?—No, we have not.

25171. Now as to the haulage roads, there is no danger in walking along when the traffic is not going along the road ?—None.

25172. Except to the men who may be working in the road ?—There is no danger there if the trams are not going.

25173. Supposing there are cases where it might be awkward to increase the width of the road, would it meet your views if there was no travelling allowed whilst the machinery was in motion ?—It would meet our views providing it could be practicable for the management, but I think it would be impracticable.

25174. What are the widths of the roads in your colliery generally—I mean these haulage roads ?—Nine feet is general.

25175. There is room enough in nine feet ?—Scarcely. There is from nine to ten feet.

25176. Do you think that there should be sufficient room on one side for passing where men have to go along the haulage roads ?—Yes.

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25177. You recognise that in an old colliery it might be difficult to find separate travelling roads ?—It would be a bit expensive.

25178. With regard to timbering, you would suggest that there should be one uniform distance throughout the whole kingdom, I understand ?—Yes, throughout the whole coalfield.

25179. That is without regard to the condition of the roof, or anything, that timber should not be more than four feet from the face anywhere ?—Yes.

25180. I suppose that it might be so near the face as to make it inconvenient to work ?—Four feet is not inconvenient.

25181. It might be ?—Yes, if the stone were of such a nature that it would make it inconvenient. Sometimes you have to work that timber right up against the face ; it depends upon the nature of the stone.

25182. In the same way as there is a maximum distance about spragging, you would make a maximum distance for props from the face. You say they should be four feet ?—Yes.

25183. Do you think that the fact of prescribing that as a hard-and-fast rule would make men think that was all that had to be done, and lessen their feeling of responsibility to people about them, to see if any more wanted to be done ?—No, that would not remove the responsibility.

25184. It would not have that effect ?—No.

25185. (*Mr. Enoch Edwards.*) With regard to this question of lamps. The lamps you have you can see well with, and it is considered to be a good lamp for detecting gas, but you may work in poisonous fumes and your lamp burns all right ?—That is so.

25186. Is that not rather an indication that the ventilation is bad ?—If there is a sudden change of the thermometer the foul air comes from the goaf. It may be all right in the morning, but it renders that place obnoxious, and men can work by these lamps, whereas they could not work with the older kind.

25187. Do you think the present law is being carried out, that there should be always sufficient ventilation ?—There is not sufficient ventilation in the mines at all times.

25188. If the present law was carried out you would get rid of that difficulty ?—Yes, if the places were properly aired with sufficient air in the different districts.

25189. Are these gassy seams you refer to ?—It is not inflammable gas, but it is of a gassy nature ; it is more the stythe which comes off the goaf—foul air. It is poisonous.

25190. If it was highly inflammable gas there would be an obligation on the colliery people to clear it out ?—Or otherwise prevent the men going in.

25191. You could not work at all ?—No.

25192. Do you suggest that they are lax with regard to the ventilation ?—If they had more gas to attend to the collieries would be better ventilated. We had a case at one of our collieries where a man was almost suffocated from foul air, and yet gas could not be detected.

25193. Your mines are not alone in that respect ; where there is no fear of an explosion there is a tendency to neglect ventilation ?—We have nothing to contend with in Northumberland so far as inflammable gas is concerned. Very few of our pits are subject to that. We have more to contend with in foul air or stythe.

25194. They are not sufficiently ventilated ?—No.

25195. It is the business of deputies to do this timbering ?—According to the Act, it is the duty of the man, but of course this is also a suggestion that the deputy should be responsible in his presence, and in the absence of the deputy the workman to be responsible.

25196. Your customs are similar to Durham in reference to timbering ?—I do not know the system in Durham.

25197. The deputy is not known in any coal mine in the kingdom except Durham and Northumberland. We were told yesterday that his duties were to see to the timbering of the place ?—Previous to the 1887 Act coming into operation it was the duty of the deputy, and he always used to attend to the timbering, but since that Act came into operation he throws it on the workman.

25198. When you suggest that there should be a fixed distance for timbering of four feet, do you do that with the knowledge that the men would have to set it ?—In the absence——

25199. Never mind the absence ?—Yes.

25200. Is that a proposition to which your men assent—that they should be forced to put up timber for four feet ?—No, we simply make that suggestion.

25201. Is the suggestion you are making to apply to Northumberland only ?—I should say that it should apply to the whole of the coalfield.

25202. The whole of the coalfield of Northumberland ?—Where this Act extends to.

25203. Have you had any experience of any other measures than those of Northumberland ?—I have not worked in other mines except Northumberland.

25204. There are peculiar ways in many counties. You have had no other experience ?—I have not worked in other mines except in Northumberland.

25205. You think in Northumberland that there will be no difficulty in having a fixed definite limit ; whether the roof is bad or not it should be set four feet ?—There are Special Rules for Durham and Northumberland.

25206. With regard to this timbering rule, you suggest that timbering should be set whether required from the nature of the roof or otherwise : so far as you can see it should be set compulsorily every four feet ?—Yes, and to be uniform throughout the whole of the coalfield.

25207. You make that suggestion from your knowledge of Northumberland only ?—That is so.

25208. You do not know how that would affect other parts ?—No, our districts suggest what would best suit them, I suppose.

25209. When asked about travelling ways you suggested that there should be a travelling way along the main roads ?—I am acting as compensation agent in Northumberland and part of my duty is to attend the inquests and ascertain the causes of the accidents. At one particular colliery there was a man working and there was no travelling way and no width between the ways. This man was getting into a refuge hole when a set caught him and knocked him down ; he was a yard or two off the refuge, and had he got in he would have been all right, but there was no means whatever of saving him.

25210. When the previous Act was framed the pretty general consensus of opinion was that there should be some refuge place where a man could fly in case of danger. Do I understand you to suggest now that instead of manholes there should be a permanent width of way for a man to travel in and out ?—Independent of the refuge holes. I think the refuge holes should be 10 or 12 yards apart. They could be continued.

25211. Would that be necessary if you had a permanent way ?—I am afraid it would be, because they have to be at least six feet in from the way—that is the refuge holes. They must be six feet clear, and if we had a travelling way three feet wide it would not be sufficient in case of a set getting off the rails.

25212. It would not afford the same security. If a man is too near the run-away tram there would be not the same protection ?—There would not, unless he had a refuge hole.

25213. If you make your main roads sufficiently wide in the first instance you could make a side road ?—Yes. It takes six feet for the tubs to pass each other and we drive them nine feet to ten feet, and there are three feet available nicely for a travelling way.

25214. What do you do with that three feet now ?—They just stow it up with anything.

25215. With rubbish ?—Yes.

25216. You think if the rubbish was kept clear you would be able to have a roadway ?—Yes, that could be nicely made from the shaft to the face.

25217. Where you have haulage by machinery in these lanes or otherwise, are men allowed to travel the road while the traffic is in motion ?—In some cases they are : in some cases they re not. In most cases they are.

25218. Have you difficulty where men are forbidden to travel them from their persisting ?—No, if they are forbidden they do not travel along them.

25219. When you were dealing with the question of the unskilled man, Mr. Ellis put to you a question as to whether there were statistics to prove that the percentage of accidents was greater with men who worked by themselves who were unskilled, and, I think, you said you did not know any statistics ?—I do not attach any importance to statistics on this question. I attach importance to what I ascertain when an accident has occurred from that source, and if there is a possibility of preventing the recurrence of these

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accidents, I think it is worth consideration: that is a sufficient reason for me to make these suggestions.

25220. I understand you to say with the coal hewer at the face that clause has worked satisfactorily?—Yes.

25221. You suggest to the Commission that the same clause should apply to men engaged in continual working in ways, and where men are engaged in setting and drawing timber the same rule should apply?—The last accident we had was exactly through a man of that description. He had been 12 months and knew little about the working of the mine, and was set to work by himself, and the consequence was he did not sufficiently protect himself and it came down on him and crushed him.

25222. (*Mr. F. L. Davis.*) With regard to this question of lamps, your complaint, I understand, is that y u can only detect the gas, and it does not shew the other noxious gases which are injurious to health?—No.

25223. You know what Rule 1 says about an adequate amount of ventilation, that it "shall be constantly produced in every mine to dilute and render harmless noxious gases to such an extent that the working places of the shafts, levels, stables, and workings of the mine, and the travelling roads to and from those working places shall be in a fit state for working and passing therein"?—Of course they are not always in a fit state: we find frequently they are unfit.

25224. Your complaint is that Rule 1 is not properly carried out?—There is not a sufficient quantity or air conducted round the ventilating districts.

25225. The reason for that may be because your mines are not very gaseous—not very dangerous?—They are not very dangerous.

25226. Not with inflammable gas?—No.

25227. Do you consider that what you say is a very general state of things?—Yes, I should say it is. If there is a good force of air it keeps the stythe in the goaf. If there is not a good force of air, this stythe comes back on to the working places.

25228. Do you think that the state of things obtains generally in Northumberland?—Yes, we have frequent complaints in all directions in Northumberland for want of proper ventilation.

25229. What is the system of ventilation?—Mostly fan.

25230. If this was a general state of things in your district, have you not drawn the attention of the Mines Inspector to it?—On some occasions we have.

25231. What has been the result?—There has been an improvement for a short time.

25232. Do you know in what way improvement has taken place? Has the fan been moving quicker or have there been more revolutions, or an alteration in the system or what?—A better system of conducting the air from the face and into the workings. When I worked in gassy mines we had a system of wood brattice taking the air in by the wood brattice, but now where there is no gas there is no system whatever. The air just has to come in any way it can, and is conducted in an imperfect manner around the face.

25233. I do not quite understand the position. You have spoken to the inspectors and in some cases it has been improved for a time?—Yes.

25234. Do you say, really, that the same state of things generally obtains now although the inspectors have been spoken to about it?—Yes, it very frequently happens: whenever we find a change of atmospheric conditions we find it frequently.

25235. You are constantly approaching the inspectors then?—No, not constantly. In every case that occurs we should not approach the inspector. If we did we should be continually approaching him.

25236. You do do it?—Yes, in some cases, but not very often.

25237. It occurs to me if the thing is so general and so serious, that it would be your duty to bring this very forcibly before the Mines Inspector?—We get more relief by appointing our working inspectors every three months, when every place in the mine is inspected by the working inspectors appointed on behalf of the workmen, and if they find any defect in going round the workings it is their duty to enter it in a book kept for that purpose at the mine offices, and that book is sent to the Government Inspector for inspection. We frequently have reports in that book where certain places in the mine are short of ventilation The Government Inspector can examine that book whenever he cares to do so, and there is a proper record kept every three months. Every place is examined by the working inspectors.

25238. That I know, but apart from your workmen's inspections have you called the Mines Inspector's attention frequently to this?—I could not say frequently.

25239. You could do so by anonymous letters. We have been told by inspectors that they get a large number of anonymous letters. The men are not penalised in any way for doing that?—There is a hesitancy on the part of the workmen frequently. It is a serious thing, sending for the Government Inspector, in the eyes of the management. The men who are dependent for their work and livelihood hesitate very much before they take that course. If a man interferes and is the cause of a Government Inspector coming, he can look out, because when the first opportunity arises he goes.

25240. You do not understand me: there is no reason why the man should be found out. The inspector does not say he has had a letter. He comes without notice, or only a few hours' notice to the manager, to inspect the mine because he has had an intimation that things are not as they should be. He does not tell the manager that?—But he goes to the place that the report is sent from, that particular place that may be bad, and the management have curious ways of getting to know these things.

25241. My impression is that he would be a foolish man if he went straight to that place. That is my view, and my experience is that they do not generally do so?—We have the experience of knowing what a workman has to contend with when he looks after the interests of those around him.

25242. Surely it is not to the interests of the Mines Inspector to let the management know that he has had a hint that things are not right. He does not want the men to suffer if things are not right: he has to see that they are put right, and he does not want the people who have drawn attention to it to suffer. I do not think that the Mines Inspector will let it out in any way if he has had private information?—It is str nge how the management get to know persons who make complaints.

25243. Your complaint is that Rule 1 is not properly carried out?—That is it, and we want the duties of carrying that Rule out imposed on the overman. In the Special Rules other officials' duties are set forth, and it ought to be set forth in them that measuring the air is the overman's duty.

25244. That is what you said to Mr. Ellis, but I do not understand that. Your mines, generally speaking, are not dangerous from gas?—No.

25245. You said that the sparking of the coal-cutting machines was dangerous where there is gas?—Yes.

25246. That is not in many places even in your district?—Where there is no gas it is not dangerous, but where there is gas it is dangerous.

25247. You have not much gas?—No, I am speaking generally, when I am speaking of the sparks emanating from the coal-cutting machines.

25248. You said that you have noticed that accidents were increasing where machines are used?—I do not know whether I said "increasing": I said they were frequently occurring.

25249. I understood you to say that they were increasing, but I may be wrong. Have you any figures or have you any statistics yourself to ascertain whether that is so?—We had three accidents within four months. One accident occurred where the man was actually only five yards in before the machine, timbering—putting timber in, and taking timber out, and five yards from that machine the accident occurred, and another man was working at the bottom, only 22 yards away, and he could not hear the stone fall, and the man at the machine did not know that the accident had occurred until his machine was stopped.

25250. That is a fall of the roof?—Yes. There were five gears broken down, and if the machine had been stopped they would have been sure to have heard that stone working.

25251. That is the real cause, in your opinion, of the extra danger—I mean the noise of the machine?—Yes.

25252. That is the chief cause for more accidents by using the machines?—Yes.

25253. That is why you suggest a stoppage of two minutes every quarter of an hour, or a stoppage of some kind, to hear what is going on?—There is no precaution at present for preventing accidents by coal-cutting machinery, and we think that there ought to be some precaution,

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and that is why we make the suggestion. We are in favour of coal-cutting machinery, and we think that every encouragement should be given in that direction, but it is in order to prevent accidents arising from the use of these machines that we are anxious about it.

25254. Do you consider that those machines are advisable, because they work coal that otherwise would not be worked?—Yes, we can get an average produce of six tons, whereas we could not get 2½ tons by hand. The seams could not be worked by hand that are worked by the machine.

25255. Generally you want to impress upon the Commission that since these machines have been introduced, there are not sufficient precautions taken for keeping the top up?—Yes.

25256. With regard to overmen, your great point about the overman being responsible for ventilation. I see in the Special Rules, No. 7: "He shall examine the barometer and thermometer at the bank before going down the pit, and register their indications; and caution the deputies when any sudden or unusual change has taken place"?—That is part of his duties defined here. We want the other part of the duties defined, that he shall also have the charge of the measuring of the air in the splits."

25257. "He shall inspect such parts of the mine as may be reported to him unsafe and in any way needing his attention, and so far as practicable remedy any defect"?—We want inserted there to be responsible for measuring the air in the different splits.

25258. Paragraph 6 is: "He shall, under the direction of the manager or under-manager, have the daily supervision and responsible charge and control underground of the mine or portion of the mine, and when by nomination and appointment acting as under-manager he shall perform, in addition, the duties of under-manager." That does not go as far as you want it to go?—I do not see any reason why his special duties should not be defined, to be responsible for measuring air in the different portions of the mine.

25259. Mr. Ellis said you make him responsible, but I do not see why you take away the responsibility from somebody else?—Why specify his duty in one part of the Rules?

25260. (*Mr. Ratcliffe Ellis.*) You want to have a Special Rule to provide for what shall be done. In Lancashire there is a Special Rule with reference to the under-manager: "He shall see that at least once in every month the quantity of air in the respective splits or currents is measured and entered in a book as provided for by General Rule 1"?—They simply have in Lancashire what we want in Northunberland.

25261. You want in the Special Rules a provision something like the Lancashire Rules?—Yes.

25262. (*Mr. Smillie.*) Nobody is bound to draw up certain rules of that kind unless it is an Act of Parliament?—If it is essential for Lancashire, why should it not be essential for Northumberland?

(*Mr. Ratcliffe Ellis.*) Still, the certificated manager is left in control.

25263. (*Mr. Smillie.*) What is the general system of working in Northumberland? Is it stoop and room or longwall?—It used to be what we call "board and wall," but most of the seams are now longwall working.

25264. Your thin seams working by coal cutting machinery are longwall?—Yes.

25265. The board and wall system was done some years ago?—Yes, largely, and it is much worse to ventilate than the longwall.

25266. You have some of that still, the board and wall?—Yes, seams you could not work very well in any other way in Northumberland than board and wall—in thick seams.

25267. You have 25 machines?—Roughly speaking.

25268. Is that 25 collieries at which machines are engaged?—No.

25269. In one colliery there are five or six?—A very large colliery, but I could not exactly say the number.

25270. You have not worked at a coal cutting machine yourself, but you have been down examining the workings for the satisfaction of your own Association as to their safety and what provisions will be required?—I worked at the pit where they were frequently used and I was very often in.

25271. Although not a workman at the machine, you were in?—Yes.

25272. Is it possible for a person to hear another person speaking when a machine is cutting?—No.

25273. Supposing anything went wrong with a person, or they recognised that there was some danger and they shouted at the top of their voice, it is impossible for the men behind the machine to hear?—They could not hear.

25274. The noise is deafening?—Properly deafening.

25275. You said one man went before the machine to set timber and another one came behind to set timber as it went past. There must be a clear passage between the coal face and the timber for the machine to get up?—2 ft. 6.

25276. If there are any props set in that way, a person going before the machine removes them, and puts the props in a line in order to get the machine through?—Yes.

25277. In longwall working, where it is not done by coal-getting machinery, or in any other method of mining, the experienced miner depends largely on his hearing?—Yes.

25278. You guard against falls of roof?—Yes.

25279. Sometimes even in the breaking of the roof, not only does he hear the sound, but little bits fall on the floor and warn him?—It is very seldom that the stone will come down unless it gives a certain amount of warning, and if he hears that warning he may escape an accident.

25280. If two or three men were working at the coal face, and one of them heard a sound that he thought to be a warning, he would at once shout to his mates to keep quiet until he could ascertain what the nature of the roof was?—Yes, and get out of the way as quickly as possible.

25281. Provided he hears the warning, it is all right, The crazing, we know, is the sign of danger from a fall?—Yes.

25282. The machine starts at one end of the run, and unless something goes wrong it continues to the other end, three or four hours?—They are generally on a system of cutting 90 yards in eight hours.

25283. They do that continuously, providing nothing goes wrong?—They are introducing this new system of conveyors. I do not know whether you understand that.

25284. We have not had any evidence with regard to the conveyors, that is, conveying coal to the road head, where it is filled by machinery?—Just like a screen, it runs about 90 yards, and is about 2 ft. 6 wide. The distance for the machine, added to this, makes the face nearly 5 ft. from the timber.

25285. It also, being worked by machinery, gives rise to a considerable amount of noise?—Just about the same as the machine.

25286. If the method which you have stated is the method of timbering in some parts of France were adopted, steel straps, with a prop under one end and the other end put over the coal head, it would minimise to some extent the danger from falls?—Yes, it would increase the safety and reduce the danger from falls?—Yes, it would increase the safety and reduce the danger.

25287. Would you suggest at what distance these beams or straps should be set—2 ft., 3 ft. or 4 ft.?—They should not be above 3 ft.

25288. That would largely depend on the nature of the roof?—Yes.

24289. Are you satisfied that Rule 38, which gives you the power to appoint two persons who are working miners, is sufficiently strong?—Yes, providing our suggestion is carried out that it is the duty of the manager to send one of the officials.

25290. That is a different point. There has been considerable amount of evidence given here with regard to this question. The persons appointed by the workmen must be working as miners at the time of their appointment?—Practical miners.

25291. They must be working at the time of their appointment. Have you no objection to that in Northumberland?—No, I think it is better than having—of course you could increase your Government inspectors, but I do not know whether it would be wise to make a special class of inspectors for that purpose.

25292. It has been suggested that this Rule might read persons who were or have been practical working miners might be appointed by the workmen. How would Northumberland miners feel towards that?—We have not put

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Mr. Joseph English.

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that point before them, because they are fairly satisfied with the present arrangement. The county that has most taken advantage of that Rule has had it in operation ever since it was established.

25293. You are satisfied with the present Rule, provided the management were bound to do what they do in your county—send an official round with the examiner?—Yes.

25294. That is all right if you are satisfied with that. You stated that workmen did not care to make any complaints of bad ventilation to the mines inspector because of the fear of dismissal?—Yes, we have had more than one case where that has occurred.

25295. How do you square that statement with your statement that you take full advantage of Rule 38, that the workmen appointed are not afraid to make an adverse report?—Not generally. There may be some. We have not found that, but the management regard sending for the Government Inspector as a serious question, because they run the risk of losing their certificates should the Government Inspector find that there is neglect in the work.

25296. Where you appoint two men to examine a colliery, if they find any fault with the ventilation, or point out any dangers, they are bound to enter them in a report at the colliery, and the manager is bound to send them on to the Mines Inspector. Does not that have the same effect?—No, I do not think they are as anxious; at least, they do not take action with regard to the workmen as far as that inspection is concerned, but they regard sending for the Government Inspector as a serious matter.

25297. It is unnecessary for a workman to send to the Government Inspector. Could he not be sent for through the checkweigher, or through your General Secretary, Mr. Straker? Would not a complaint to Mr. Straker at once have the Government Inspector sent for?—Yes.

25298. That would not bring the workmen into it?—We could bring him any time by sending a note to the general office or the working office, but it is looked upon as a serious state of affairs when you have to bring in the Government Inspector.

25299. Is Rule 39, which provides that a person must have two years' practical experience at the coal face before he can take charge of the place, generally carried out?—As far as the coal-getters are concerned, that is carried out.

25300. If a manager put three or four unskilled persons under the charge of one skilled person at a longwall face in your county, do you think that would be carrying out, this clause of the Act?—No.

25301. Supposing two unskilled persons were going to work at the coal face, in your opinion would that carry out this clause?—The only way, in my opinion, of carrying out the clause of that Act is for the unskilled man to be accompanied by someone, it does not matter whether two, three, or four. If he is working with skilled men for two years he is a skilled man.

25302. Do you not know the clause says "shall not work alone"?—He does not work alone.

25303. Supposing two unskilled persons are together, they are not alone?—They are not, but they are unskilled.

25304. But they are not working alone?—They are working together.

25305. If you were told that the Law Courts have held that two unskilled persons working together are not working alone, and, consequently not breaking this clause, you would think that an alteration was required?—You are not getting clear of the Mines Act by having them together.

25306. You do not think that is the intention of clause 39 of this Act?—My idea is the intention of that clause was that an unskilled man must be working with a skilled man.

25307. That he should serve an apprenticeship to take care of himself?—That is the intention of the Act.

25308. Can you say whether the deputies' districts in your county are small enough to enable the deputies to carry out their work under the Act of Parliament?—Under the present system I think the number of men a deputy has to attend to, and fire shots where he is required to fire shots, are too many. He could not do justice to the work. I think about 16 men is the number a deputy is to look over, but if he has to fire shots for these 16 men he could not do the duties satisfactorily.

25309. Is the number limited or fixed by Special Rule?—Fourteen to 16, I think. It is about an average of 14 to 16.

25310. It may be more or less according to the nature of the district, perhaps?—Yes.

25311. The first duty of the deputy should be to look after the ventilation and the general safety of the men employed at the face?—Yes; we look upon him as the man to look after the safety of the men.

25312. Is it the opinion of the Northumberland miners generally that the position of a competent person to fire shots and the position of deputy should be two different positions?—We have not had that matter discussed. We have privately thought about it, but I think if the number of men he had to attend to was reduced that that would meet the case.

25313. As a matter of fact, you think the district or the number of men they have to look after should be fixed at a point, so that the deputy could devote his whole time to looking after their safety?—Yes.

25314. Has the deputy any other duty with regard to haulage, or taking out the coal, or is he called upon to put on tubs in the road?—Yes, that frequently occurs. If anything happens the first man they send for is the deputy.

25315. He might be employed at the face putting in brattice, or doing other safety work, and he would be called out, and his first duty would be to go?—Yes, any time he is called away to go away, probably out of sight of the flat.

25316. Do you think that it is advisable that the deputy should be called away from his real duties to do work of that kind?—I do not think it is necessary. It is not desirable in any way.

25317. If it could be prevented it would be wise?—Yes.

25318. With regard to haulage accidents, there is a considerable number of accidents arising from haulage?—Yes.

25319. Have you a method of hand-drawing by a single tub in your county?—Endless rope, that is single tub.

25320. Is there any such thing as workmen conveying single tubs from the face to a lye?—Yes, lads.

25321. All horse haulage or mechanical haulage?—Pony haulage mostly.

25322. You have no hand-drawing at all?—We have in some places.

25323. Even on a horse road where a lad is driving a horse or a pony, he can be going with one tub or four or five tubs. Do you think it would be wise or necessary to have sufficient room at the side of the road for the pony driver or the man to get to the side?—You could not do that in bye-side of the flat. We have one big pit employing 400 men where they have single trams. We have a few, not very many.

25324. Did you not tell Mr. Edwards that you drove your places 9 to 10 feet wide?—Yes, the main intakes.

25325. Are your ordinary gate-ends and longwall workings driven 9 to 10 feet wide?—Yes, and as soon as they get to work they are broken, and they sometimes come in at the sides until only 5 feet.

25326. That is coming in?—Yes.

25327. What width are the buildings put in in the ordinary roads?—The packs, do you mean?

25328. Yes?—About four feet. That is in the gateways.

25329. They are built 4 feet wide?—Yes.

25330. There is practically only room for the single road, and not room for passing?—If the boy gets off he can scarcely get by the tub to put it on.

25331. Is that desirable?—No, if you could avoid it.

25332. Could you not be building the packs wider?—If you did build them wider the weight of the strata comes on, and the bottom heaves, they come in in two or three days, and you would have to increase the width.

25333. If they were 9 feet wide and the weight came on the packs they would come in a certain distance?—Yes.

25334. Supposing they came in 3 feet, they would still leave it 6 feet wide?—Yes.

25335. If there were 4 feet to begin with, and they come in 3 feet, you do not leave more than 1 foot?—They could not come in that much.

25336. You really pack them 4 feet now?—Yes.

25337. How far do the packs come in?—The packs in the longwall sometimes do not come in very far, but it is the broken pillars in the higher seams.

25338. We are dealing with the longwall now. What width do you pack them?—Four feet.

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25339. They do not come in very much ?—No.

25340. If you packed them 4 feet and they did not come in much, you would have room then ?—Yes ; it would increase the amount of stone-work considerably.

25341. We are not concerned at the present time so much with that as with the safety of the men. Has there been any accident from these roads being so narrow that a person could not pass by the side of a tram ?—I am not aware of accidents from that. I have known an accident occur from the place not being sufficiently high where the timber has got broken down and a boy has got his head almost taken off.

25342. Are your workings fairly flat ?—Yes.

25343. There is not much of a gradient ?—No.

25344. You could conceive where, if there was a steep gradient of 1 in 2½ or 3, or even 4, that there might be considerable danger of a full tub coming down and a person not having room to get off ?—I can see the danger, but I do not think that has frequently occurred with us. It would be a difficult thing to keep the working place that width.

25345. You do not think it would be necessary to legislate for that ?—No.

25346. You were asked by Mr. Ellis with regard to trailers or devils on the back of the last tram of a train of tubs going up a heading. Did you say that was not necessary ? —No.

25347. You do think it is very necessary that there may be something of that kind ?—I think it is really necessary.

25348. You have runaway points at the present time on your haulage roads ?—Switches.

25349. So that if the rope breaks, or a coupling, or a draw-bar, they will be switched off and not run down ?—They are mostly for sets, and to make provision for the rope breaking. These switches switch them off the rail. We also have " cows " at the back of the tubs.

25350. They have a trailer on the back of the tram ? —Yes.

25351. It has been suggested that sometimes a runaway takes place where a train of trams has to go down lower, down below the dook. In that case you could not have a cow or trailer on, because it is the wrong end first ? —Yes.

25352. It has been suggested that a continuous chain from the end tub should go over the top or end tubs, so that if a coupling or draw-bar broke it would prevent part of the train running away. If it was proved that that was effective in preventing a runaway, do you think it would be wise to make it compulsory by law to have that ? —Providing that such an apparatus could be invented.

25353. Supposing we tell you that it is invented, and in use at many collieries, and has been found of great service, what would you say ? You can notice at once as a practical man that there is very little expense or time in it. It would not be inconvenient to do a thing of that kind ?—No.

25354. Do you think it would be wise to do that as a precaution against runaway trams ?—Of course, because you could not use too much precaution against runaway trams ; it is a very dangerous thing. Mr. Straker reminds me that there was a man killed last week because there was not one.

25355. Have you had any accidents in Northumberland, so far as your knowledge goes, in which a person working alone, either at night time or at some distant part of the mine, has been killed and it has been some hours before he was discovered ?—We had a man working in the waste. He did not get killed, but he tried to extricate himself, and the more he tried the more the stone came in, and he gave up. We have them frequently working by themselves.

25356. Would it not be wise to provide that a person should not be allowed to work alone ?—That is the reason why we suggest the two years.

25357. You suggest two years at the coal face. At the present time a man might be employed in repairing work on the roads alone ?—By the face is understood inside the flat. I do not know what you call it in Scotland.

25358. We call it the lye. There have been accidents to persons who were repairing on the main haulage roads, sometimes working all alone ?—Yes, that has occurred, but I do no see that you could make it compulsory for two men to be always working together.

25359. You favour the idea that wherever possible a person should not be employed alone ?—Yes.

25360. Either at coal-getting or any other dangerous work ?—That is our idea.

25361. Have you any drawing of timber in your board system at the pillars ?—Yes, we have a lot of drawing.

25362. Who draws the timber ?—A special man appointed for the purpose.

25363. Deputies, or special men ?—Special drawers.

25364. Who draws the timber in the longwall ?—Special drawers set down for that purpose.

25365. Not the deputies ?—No.

25366. Are you ure of that ?—Yes

25367. Supposing a person speaking on behalf of the deputies of Northumberland told us different yesterday, what would you say ?—That may occur at their particular collieries.

25368. (*Mr. F. L. Davis.*) You said that these stretchers and bandages and other things should be kept in the deputy's chest ?—Yes.

25369. Where is that generally in your pit—at the bottom of the pit ?—Close to the working face.

25370. How near to the working face ?—Generally about 200 yards off.

25371. On an average about 200 yards ?—Yes.

25372. Does he keep that chest in a little room ?—Yes.

25373. His room, I suppose it is ?—Yes.

25374. (*Mr. Smillie.*) It would be safe from danger of falls ?—Yes.

25375. (*Mr. F. L. Davis.*) He keeps his books there, too ?—Yes, his tools.

25376. And any odds and ends ?—It is cut out of the rock. He has his seat and keeps his clothes there as well. It is practically his office.

Mr. JOHN REES POWELL, called and examined.

STATEMENT OF WITNESS.

25377. (1) I am of opinion that the Mines Act should be rigidly enforced, *i.e.* (1) A plentiful supply of timber be sent into the workings to the parts of the mine stipulated in General Rule 22, and of a suitable character. I would advise all caps, or lids, for upright posts, be of good length and thickness and be prepared on the surface, and sent into the mine in sufficient quantities for all use. I would emphasise the need for all timber to be set in a proper manner, leaning at the right angle, and of sufficient hold in the floor, *i.e.*, stamping, all sprags used in the coal face to be set properly at the required distances, with a tapered wedge of wood against the coal at the end of the sprag nearest the coal face, and would recommend that where places require to be made higher on underground roads and timber has to be taken out, it be done by means of a timber-drawing appliance and the necessary bars for the purpose. Should a fall occur, workmen and officials should see that the cavity or holes are covered up before any traffic or passage of persons were allowed, and in every case the officials should see all timber on the roadways is properly cut and set.

(2) If the hours and duties of the Colliery Examiners were reduced in number, then greater opportunities would be presented for enforcing the rules framed for the miner's safety. Accidents arise now from falls of roof and sides owing to postp nement on the part of the miner of these acts necessary for safeguarding his own life. Better supervision—possible only with reduced duties and hours—would make accidents less possible.

(3) With regard to shot-firing, I would point out that when done during shifts, it is done at a time when by the traffic of men and horses most dust is raised in the roadways. As this is the finest dust, and carried by the air, it is also the most dangerous.

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Mr. John Rees Powell.

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(4) As specified in the Monmouthshire and Forest of Dean Code, Special Rule 11, and according to General Rule 4, the examination before commencement of each shift; that in all cases the examination, or inspection, of the workings should be made with a locked safety lamp, and in every case except where gas has not been found within the preceding twelve months, by a lamp more sensitive to the presence of fire-damp than the Davy, as well as the ordinary lamp now in use, so that all presence of gas or cap might be noted. I think this rule should be altered thus:—that instead of one examination before each shift, and the examination made during the shift as now, there hould be an examination before the commencement of the shift as now, and at least one other during a shift of eight hours, and that in collieries where there are two shifts working night and day, the examiner be relieved at the end of his eight hours and other examinations made by the relieving examiner, and that a true record of all examinations be entered in the report book, and by so doing there would be recorded at least six examinations in the 24 hours. And whenever no one is in the mine or district, he should be accompanied by someone during his examination.

(5) I think also that the competent person mentioned in General Rule 4 and Special Rule 11 should have shown his competency by his practical experience and by examination, and I would suggest an examination instituted for all colliery examiners, and in each new appointment that practical men with such certificates should have the preference for such appointments.

(6) Whenever Special Rules need amending, or instituting, that there be representatives of all classes engaged in the mine on such board, especially examiners, as they are the persons who are employed to see that the Act is applied in very many instances. They could possibly offer many useful suggestions in the formation of rules.

(7) The workmen should be given a copy of the Rules and should be encouraged to ascertain what is contained in the book presented to them, and whenever a new copy is required the same should be had on application to the colliery officials or management, and new copies should be given out every year to all who require them, and prizes should be offered to workmen, or certificates for the efficiency in the knowledge of the Act or Special Rules.

(8) It should also be the aim of all officials to see that the Act is properly carried out, and they should frequently inform the men under their charge of the requirements of the Act; and every workman with a boy under his charge should assist him in acquiring a full knowledge of all appertaining to him to good discipline in mines.

(9) There should, as far as possible, be a mutual understanding between the officials and workmen, and every effort made to respect those in charge, and it should be the duty of each man to see that each boy under his care is not allowed to remain about the main roads at the commencement of the shift, and each person, unless on business, should at once proceed to his working-place beyond the zone of all traffic.

(10) There should be special facilities in every colliery for rescue work, and there should be men chosen in every colliery to learn all new methods of applying rescue apparatus. There should be a central station in each mining district where this knowledge might be obtained, and at every colliery sufficient rescue apparatus kept for any purpose that may arise.

(11) In every colliery ambulance work should be encouraged, and instead of it being stated in General Rule 34 that ambulance or stretchers, with splints and bandages, shall be kept at the mine in case of accidents, it should state that they be kept in each district, and such other things as may be necessary for use in case of accidents, and that the same should be kept in a box for the purpose, and the names of all ambulance men should be posted up at the pit head or other entrance to mines in a conspicuous place, also the districts in which they are engaged, so that in case of injury to any person they may be sent for without undue delay.

25378. (*Mr. Ratcliffe Ellis.*) You are a colliery examiner of Vivian Colliery, Abertillery, and are General Secretary of the Monmouthshire and South Wales Colliery Examiners' Association?—Yes.

25379. What exactly is the nature of the Association?—It is an association of underground examiners and deputies

25380. What are examiners?—Men who examine for the safety of the mine.

25381. Firemen?—Yes.

25382. (*Chairman.*) What is the difference between a deputy and an examiner? A deputy is supposed to be the same as a fireman?—Not in our coalfield.

25383. What is the difference?—They call them deputies because they are deputed to fill our position during our absence.

25384. He is a deputy fireman?—Yes.

25385. (*Mr. Ratcliffe Ellis.*) First of all you deal with the question of timbering?—Yes.

25386. Have you any suggestions to make in addition to those which are now provided for in the General and Special Rules as to timbering?—Yes. What I have mentioned here I think would be of great benefit to the safety of the miners.

25387. You say that there should be a plentiful supply of timber?—Yes.

25388. That is required now?—Yes.

25389. It is not complied with, you think?—In nearly all cases, but there are cases where it is not.

25390. Where there is not a sufficient supply?—Yes.

25391. You think that rule which now requires that there should be a sufficient supply of timber should be complied with?—Yes.

25392. Have you anything more to suggest about the quantity of timber that should be sent down? Should it be cut into different lengths, or are you satisfied with that? I see you say you would advise all caps or lids for upright posts to be of good length and thickness, and be prepared on the surface and sent into the mine in sufficient quantities for all use. Can you tell me what length is required?—If there is a lid supplied on top it would materially assist the miners in getting these props up when called for immediately when a sudden squeeze came on.

25393. Would you put one or two lids?—One would be sufficient, providing you had the prop long enough.

25394. They should be supplied on the surface. Are there lids made now?—Not in all cases.

25395. You think that should be done on the surface. If the prop was not long enough you could put a lid on and make it long enough?—Yes.

(*Mr. Wm. Abraham.*) A lid is placed on top of a prop, and covers the greater part, and a great deal depends upon the way that lid is made in order to run with the top.

(*Mr. Ratcliffe Ellis.*) You do not anticipate any objection to that?

25396. (*Mr. Wm. Abraham.*) No. The point is the timber is sent down as it is without being made, and the man has to make it as best he can at the place. The suggestion is that a number of these lids should be prepared on the surface, and the man select the best he can, and trim it to his requirements. That is what you mean?—Yes.

25397. (*Mr. Ratcliffe Ellis.*) That is with reference to the supply of the timber?—Yes.

25398. Then you speak as to the drawing of the timber?—Yes.

25399. What is your suggestion about that?—I would suggest that Silvester's method of drawing timber is a very good one. In nearly every case in the seams of South Wales they have to be timbered, and when the road gets too low they have to be taken out to allow of the passage of the traffic, that is, the horses and so on. I think that if these men were compelled to use these appliances in drawing out this timber after they had been partly loosed, it would be a source of safety to them.

25400. You think that the timber should not be taken out by knocking it from under with a hammer, but that there should be an appliance like a lock and chain, by which you could get the prop out without getting underneath the place?—Yes.

25401. Is that in use in your district?—Not generally.

25402. Do you thing that should be made compulsory?—Yes.

25403. Have you anything to suggest about who should draw the timber? Who draws the timber now?—The timber-man, the man in charge of the job. A section of the work he is told off to repair, and I think that man should do it, or sometimes he could have assistance from his mate, as we call him down there.

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25404. Do you think that there should be a special man appointed to draw the timber?—The timber-man now employed could do it. He does it now, often.

25405. With reference to the hours of the colliery examiners, what are the hours now?—Twelve, generally, in the mine.

25406. Do you think that is too long?—Yes.

25407. During the time that you are in the mine can you do the whole of the work that you have to do? Can you make a proper examination of your district in the 12 hours?—Yes.

25408. Do you think it is too long?—Yes.

25409. What length of time do you think would be proper?—Eight hours.

25410. What colliery do you work at?—Vivian Colliery, Abertillery, Monmouthshire.

25411. Is that a large colliery?—Yes.

25412. How many examiners are there there?—Ten.

25413. How many deputies?—Two.

25414. Do they work one or two shifts?—Two—one on the coal, and a repairing shift.

25415. Do you think the hours should be reduced to 8, and do you think that you could make a more complete examination in that time?—I think that if there were three shifts of examiners it would materially affect the safety of the mine.

25416. As to shot-firing, have you shot-firing at your colliery now?—Yes.

25417. Do you fire between shifts?—Yes.

25418. Do you use safety lamps?—Yes.

25419. How do you fire, electrically or with a fuse?—Electrically.

25420. Do you fire now between shifts?—Yes.

25421. It is not general. Do you fire in the repairing shift?—No. Our colliery commences work, that is winding coal, at 7 a.m., and they cease at 4.45, and shot-firing commences at 5.40, and the men are supposed to be clear then—all men except those employed as shot-firers and examiners.

25422. Do you recommend that that system should be made general?—I recommend that that should be made general between shifts, but not so soon after the men have finished work.

25423. You would allow an interval between the time the men come up from the working shift before the shot-firers go down?—Yes.

25424. Do you fire in the coal?—We fire in the coal in one seam in the colliery.

25425. Do you recommend that the shot-firing in the coal should be between shifts?—I might say in this one seam, namely, the Elled seam, that the firing goes on during the working shift, but there is an exemption from the mines inspector.

25426. Do you suggest that there should be no shot-firing in the coal except between shifts?—I suggest that the firing should only take place on main roads between shifts.

25427. You would not apply that to the firing in the coal?—No, shot-firing only during shift in exempted seams.

25428. There might be certain seams where even the shot-firing in the coal should not take place except between shifts?—Yes.

25429. You would not make that general?—No.

25430. You would make it general that shot-firing in the roads should be only between shifts?—On the main roadways.

25431. Would you also suggest that there should be no shots fired in the main road except on the direct instructions of the manager?—Yes.

25432. Have you anything more to say about shot-firing?—Only that I should like to have the time increased, that is to say from one hour.

25433. More time given to shot-firing?—Yes.

(*Mr. Wm. Abraham.*) That shot-firing should not be done so soon after the shift is over.

25434. (*Mr. Ratcliffe Ellis.*) That is what he says. You said shot-firing should not begin until some time after the shift is over?—Yes.

25435. What length of time do you suggest?—At least four hours.

25436. How would that work in? How long does the shot-firer take with his work?—Sometimes two hours.

25437. When would the repairing shift go down?—I would suggest for the safety of the mines that there should be a shift of eight hours repairing.

25438. An eight hours' coal-getting shift, shot-firing during the next eight hours, and after that an eight hours' repairing shift?—Yes.

25439. (*Chairman.*) This is with the object of not raising dust in the roadways?—Yes.

25440. (*Mr. Ratcliffe Ellis.*) Now with reference to the Special Rules. What Special Rules do you desire to alter? You mentioned General Rule 4, which is as to the examination before the commencement of each shift. What alteration do you want to make in that?—It says in our Monmouthshire Rules that the examination shall be made with a locked safety lamp, except where gas has not been found within the preceding 12 months. I suggest that in every case the examiner should use the locked safety lamp, and where gas is found frequently that there should be a more sensitive lamp than now in use.

25441. You would suggest that in every mine where gas has been seen at all the examination should be with a locked safety lamp?—Yes.

25442. But you think that the examiner should have a more sensitive lamp?—Yes, in the more fiery mines.

25443. What lamp do you suggest?—It will be hardly fair for me to give my opinion as to the best lamp that is on the market, but Dr. Clowes' hydrogen lamp is a very good lamp.

25444. Examination No. 1 is to be made before the shift?—Yes.

25445. What do you suggest about the examination during the shift?—After the examination has been made before the shift I suggest that there should be another one made again at least during the working shift, and that both should be recorded.

25446. The second one does not need to be recorded?—No, not at present.

25447. You think that they should both be recorded?—Yes.

25448. If there is more than one shift being worked what then? You say that in collieries where there are two shifts working night and day the examiner should be relieved at the end of his eight hours and another examination made by the relieving examiner?—Take the colliery I work in now: the fireman could start at 3.30 a.m., make his examination, and come out and see his men before they entered the mine, and then, I think, he should make another examination and cease work at 11.30, completing a shift of eight hours.

25449. Forget the eight hours for the moment. If there are two shifts, one immediately following the other, would the examination during the first shift do for the examination prior to the beginning of the second shift?—That could be arranged. In our colliery now the night examiner examines for the day shift, and the day examiner examines for the night shift. They both commence at 3.30 in the morning and afternoon.

25450. If your system was adopted, there must be an interval of eight hours between the two working shifts. That could not be done?—In the interval of eight hours the examiner could be in examining the work while the shot-firer fires his shots.

25451. They could examine during the shot-firing shift?—Yes.

25452. That would do for the examination before the second shift of working?—No, he might make an examination at least two and a-half hours before those men came in—that is the repairing shift. That would do. The examination he had made two and a-half hours previous would do for the shift coming in to repair, and the examiner under the repairing shift could make the same examination for the coal shift, if necessary, according to arrangement.

25453. That would be only one shift for coal-getting. You could not have two coal-getting shifts?—No.

25454. With reference to examinations, have you anything more to say about that?—Do you mean the examination in the mines?

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25455. I mean the examination before and during the shift. Have you said all that you wish to say about that? —Yes.

(*Mr. Wm. Abraham.*) I do not think he has finished. Does he not suggest that the relieving examiner should make really the third examination?

(*Mr. Ratcliffe Ellis.*) No.

(*The Witness.*) That is what I meant.

25456. (*Mr. Wm. Abraham.*) There is something in his mind which he has not made clear?—I had better explain.

25457. What time do you go down in the morning to make the first examination?—3.30, generally, in South Wales.

25458. When you have done that, what do you do next? —We come back to report, and then after the men are sent away.

25459. What do you do? Do you examine the lamps of the men?—Yes.

25460. What do you do next?—After the men are sent away to their various working places, we get a list from the pit top saying who is absent, and so on, and, of course, we have to make arrangements to fill up those gaps, and then we have to attend immediately to the places that we might have found unsafe or dangerous during our preceding examination, and make them safe, clear any gas that might be present, and any bad roof or sides get attended to at once. We make it a point to go to those places at once.

25461. What do you mean by clearing any gas?—Diluting any gas we might find.

25462. Do you do that where the men are at work?—If it is not in large quantities. Small quantities can be cleared

25463. Are you in the habit of clearing small quantities of gas from stalls when the men are at work in the district? —Providing that the amount is not very great. If the amount is great we get the men all cleared from the return side of it.

25464. Providing that there is not a great amount of gas, you clear it during the time the men are at work?—Yes, if it is not a very large quantity.

25465. When you have done that, what else do you do during the day?—We examine all the roads and faces and see that timber is sent in, and various other duties besides such as keeping time and looking after things generally.

25466. Looking after the traffic to see that the coal is coming out from your district?—Yes.

25467. Do you do that?—Yes.

25468. Are you called out occasionally from your own duties to attend to help the haulier, or see that the coal is got out properly from the district?—Yes.

25469. When do you, as a rule, make your last examination?—We make our examination in Monmouthshire, generally, at 3.30 p.m. in the afternoon, and that suffices for the night-shift.

25470. Is that the second time that you are examining the faces?—Yes.

25471. After you have examined them the first time before the morning shift, you do not examine again until three o'clock in the afternoon?—Yes, in every case where the examiner goes in preceding the shift they make at least one examination after, before they go out. If they go in at 3.30 in the morning they leave at 3.30 in the afternoon, but in cases where I am employed at present we start at six o'clock in the morning. Of course, the night examiner has made his examination for the day-shift. Then we go about our business, examining the whole of the district that we are engaged in, and then at 3.30 in the afternoon we examine for the night-shift, so really our last examination is most important.

25472. Is it at 3.30 in the afternoon that the day fireman makes his first examination?—No.

25473. You say you take time and then what do you do; We want to know exactly what you mean?—I will explain to you. Take two cases.

25474. The night fireman makes the examination preceding the day-shift?—Yes.

25475. When do you make your first examination?—We start about eight o'clock in the morning, after the men have got to their places, sometimes before then. First of all we remove all these dangers, as I told you, and then we start our examination. We come back then and have our food and start again. We are in the district before 3.30, but we examine minutely from 3.30 to the end of our shift. Now do you understand, Mr. Abraham?

(*Mr. Enoch Edwards.*) He is given two shifts and two separate systems.

25476. (*Mr. Wm. Abraham.*) He did not make it as clear as, I think, he had a right to. You make a thorough examination in the morning from eight to about 12 o'clock, or later. That is your first examination after you have seen everybody at work?—Yes, we are generally engaged from about eight o'clock to 12, and then we come back to our station for refreshment, and after seeing that things are all right, and having refreshment, we next go in our district and start our examination at 3.30 for the night-shift. That is after we have been at work over nine hours. Do you follow me now?

25477. (*Mr. Ratcliffe Ellis.*) With reference to the qualification for the examiners, do you think that they should have certificates?—Yes.

25478. By examination?—Yes.

25479. Would you suggest that a second-class certificate would be satisfactory?—Yes; but I am sorry to say that, perhaps, the supply would not meet the demand of second-class certificates.

25480. If that were arranged, you would let the men occupying the positions now have service certificates. A man who had been examining for so many years would have a service certificate, and a new man would have a second-class certificate?—Yes, or some new certificate instituted.

25481. Do you suggest a different examination from the second-class examination?—Yes, for examiners.

25482. What sort of an examination would it be?—An examination with a knowledge of the Coal Mines Act, and, of course, a knowledge of gas and ventilation and general education.

25483. They do not want much more for the second-class certificate?—They generally do, I think.

25484. You think, at any rate, that there should be some examination conducted by the Home Office to qualify the fireman for that position?—Yes.

25485. With regard to the making of Special Rules, you suggest that there should be an alteration in the present method of making them. You say: "Whenever Special Rules need amending, or instituting, that there be representatives of all classes engaged in the mine on such Board, especially examiners, as they are the persons who are employed to see that the Act is applied in very many instances. They could possibly offer many useful suggestions in the formation of rules." What sort of a Board is this to be?—There was a Board in Monmouthshire some two years ago composed of the mines inspector for the district and the various colliery managers and miners' agents.

25486. It was voluntarily invited to discuss this matter? —Yes.

25487. You suggest that the examiners should be on that Board?—Yes.

25488. Not necessarily miners' agents, but persons occupying the position of examiners?—Yes; as well as other representatives.

25489. I will put to you a difficulty there is about that. Do you suggest that no rule should be proposed except one that was approved by that Board?—In the making of Special Rules, that is, appertaining to collieries, I think every class should be represented on such a Board.

25490. Would you go so far as to say that the owner of a mine should not be entitled to propose a Special Rule unless it was approved by this Board?—It is not now, generally.

25491. Would you go to that extent and say that a man should not be entitled to propose a Special Rule unless it was approved by this Board?—No.

25492. Would this meet your views. Supposing that the owner proposes a rule, as he does now, but before it is established the Home Secretary should give notice, and anybody interested—examiners, workmen, miners' agents, or anyone else—should have an opportunity of objecting to it, and if their objections could not be settled that it should be decided by arbitration?—That would be better, but I do not see what would prevent doing as I suggest here.

25493. I am showing you. Supposing the owner was anxious to propose a rule, he could not do it if the Board said "That rule shall not be proposed." My suggestion is that the men should be entitled to be heard at a later stage before it is established, but that it should be proposed by the owner, if he chooses, without asking anybody. Do you see any objection to that? Of course, before it becomes law all parties should have an opportunity of stating their objections to it?—As I said before, I do not see why you could not adopt the suggestion I have put down.

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25494. I do not see why you could not adopt mine; that is the difficulty between us. Do you see any difficulty in adopting mine, because I do not propose that the rule should be established until everybody has had an opportunity of discussing it?—I quite follow, but I think, as I suggest, if the men were called in in the framing of those rules, that it would be satisfactory, and that it would entail less cost and trouble in getting them through.

25495. Supposing the men are not to have a veto, what is the use of calling them in?—They could have a veto as well.

25496. I call them in when they could have an opportunity of vetoing and go to arbitration. However, you prefer your own system. You think that mine is better than the state of things at present, but you prefer your own system?—I think that if we adopt what I say, the Rules could be framed better.

25497. (*Chairman.*) Is not your suggestion rather that the men should be consulted at the earliest possible moment with regard to these Rules?—Yes.

25498. When an owner has once put forward a set of Rules that he thinks ought to be established, he has committed himself to those Rules. Is it not your suggestion that before the owner has committed himself at all to these Rules, that he should have a conference with the men, to discuss the matter before he comes to any definite conclusion, even as to whether he would wish to see the Rules established?—That is my view.

25499. (*Mr. Ratcliffe Ellis.*) In that conference are the men to have a right to say "That Rule shall not be proposed," because if they are not to have that right what is the good of a conference?—I do not want to go as far as that.

25500. You suggest that there should be a conference, but if at the conference they did not agree, the owner should still be at liberty to propose his rule?—He could go on.

25501. Do you not think that that would cause more friction? Supposing you had a meeting and did not agree?—I can cite a case when they proposed and formed the last new Special Rules in Monmouthshire, and the Forest of Dean. I think that nearly everybody was represented except the examiners.

25502. That was a voluntary meeting at which they were asked. There was no compulsion put upon the owner to propose a Rule.

(*Mr. Wm. Abraham.*) The result of that was so good that the witness wants to make it compulsory, in order to secure a similar result.

25503. (*Mr. Ratcliffe Ellis.*) I want as much liberty as I can get. My scheme would enable examiners and everybody interested to make an objection and be heard. We need not go further into this matter, but you say you prefer your own scheme?—They were allowed 14 days last time to make objection.

25504. My scheme is different, but you prefer your own?—Yes.

25505. Now with regard to the administration of the Mines Act, you think that everybody should have a copy of the Rules?—Yes.

25506. They can have them now if they apply for them?—It is given them when they start work.

25507. (*Mr. Smillie.*) Officials only—not the individual workers?—Yes, everyone.

25508. (*Mr. Ratcliffe Ellis.*) You say that the workman should be encouraged to ascertain what is contained in the book presented to him. Who is to encourage him?—I state that further down.

25509. Is it the officials?—And the owners, too. In South Wales and Monmouthshire they offer prizes to-day for ambulance efficiency. I think if they put up prizes every year for the workers that there would be a better opportunity for them to know what is in the Book of Rules.

25510. These are for safety. Should he require to have a prize offered him to ascertain what is contained in a book compiled for the purpose of securing his own safety?—Often the men never open the book after they get it.

25511. Do you encourage them to ascertain what is contained in it as examiners?—Yes.

25512. Can you suggest any better encouragement than that which is given by the officials?—Yes, I think it would be a stimulus to them if there was a certificate given, or something.

25513. You think that it would induce them to read the Rules if prizes were offered?—Yes, by the manager or Owner.

25514. Then you say in paragraph 8: "It should also be the aim of all officials to see that the Act is properly carried out." There is no need for an alteration of the law to provide that?—No.

25515. "And frequently inform the men under his charge the requirements, and every workman with a boy under his charge should assist him in acquiring a full knowledge of all appertaining to him to good discipline in the mines"; that is excellent, and everybody agrees with that. "There should, so far as possible, be a mutual understanding between the officials and workmen, and every effort made to respect those in charge, and it should be the duty of each man to see that each boy under his care be not allowed to remain about the main roads at the commencement of the shift, and each person, unless on business, should at once proceed to his working place beyond the zone of all traffic." Excellent again; we quite agree with that. You do not want any legislation in order to secure that?—It is not compulsory.

25516. How would you make it compulsory that the officials and the workmen should have a good understanding, and that each man should be made to do his duty?—I say about this last phrase about the boys on the main road, that I have seen boys about the road after the traffic has commenced.

25517. You would order them away?—Yes.

25518. What more do you want than that?—I should say make it compulsory for them not to go there. I have heard men tell me that it is no business of mine.

25519. They will tell you that whatever the law is?—If I had the law at my back it would be better.

25520. It is your business to see that they are not there, and you send them away now?—Yes, but I am told then it is not my business.

25521. I think you cannot alter that by an Act of Parliament. Then you say that there should be special facilities in every colliery for rescue work, but the Commission has already considered that matter and issued a report upon it. Then you say: 'There should be a central station in each mining district where this knowledge might be obtained." That has been under consideration. "In every colliery ambulance work should be encouraged, and instead of as now stated in General Rule 34, where it states that ambulances or stretchers, with splints and bandages shall be kept at the mine in case of accidents, it should state that they be kept in each district, and such other things as may be necessary for use in the case of accidents. You want them to be kept somewhere near where they are wanted?—Yes, in the district.

25522. The chest of the deputy or examiner has been suggested. Would that be a suitable place to keep them?—Yes, or the lamp station.

25523. Is there anything else you wish to add about that?—No, I do not think so.

25524. (*Mr. Wm. Abraham.*) What are the hours generally worked in the district of the Association of which you are Secretary?—With very few exceptions, one or two collieries, the examiners work 12 hours.

25525. 12 hours at the pit, or 12 hours in all?—12 hours at the pit, down the pit often.

25526. Is there something else they have to do when they come up from the pit?—Yes, I have heard in some places that they have to do duties that they should not.

25527. You are here now representing the Association?—Yes.

25528. You have special ways of knowing what is the rule and practice at the collieries in the Association?—Yes.

25529. Will you kindly tell us what are the hours generally worked in the district?—They work 12 hours down the pit, and after having made their report they have to consult with their superior officials as to the general state of the roads, and so on.

25530. What kind of a report?—A verbal report.

25531. Again, what time would you add to the 12 hours, another hour or 1½ hours, to be the general hours worked by the examiners in this district?—About 12½ hours, until they are relieved.

25532. Do you consider that too many?—Yes.

25533. You consider it too many by a great number?

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(*Mr. Ratcliffe Ellis.*) He says eight hours.

(*Witness.*) I suggest that it is too great by a third of the time.

25534. (*Mr. Wm. Abraham.*) Have you any recommendation to make as to improving the examinations in your district?—Yes, I think the examination should be made with a more sensitive lamp than we have at present.

25535. What about the number of examinations made?—I should say two at least in eight hours.

25536. Two in addition to the one preceding the shift, or two including that one?—I should have three sets of examiners in every colliery, that is, one starting, we will suggest, two and a half hours before the commencement of the shift. That is, the pit is open at 6 o'clock in the morning for general work and for lowering persons, and coal winding commences at 7 a.m. There should be an examination made before each shift commences—say the first at 3.30 a.m., and another one at least after the coal shift commences up to 11.30 a.m.; then be relieved in the district, by another examiner coming in fresh. He should make an examination then, and another up to 7.30 p.m.; then he also to be relieved in the district, and another examiner start at once to examine and make an examination then, and also another before he is relieved, say 3.30 next morning, and all examinations recorded, and by this method there would be an examiner always in the mine.

25537. What system is there in the district for keeping the roads clear of coal falling from the trams, and rubbish, and so forth?—When coal falls off the trams it is cleared away.

25538. How often are the roads cleaned?—In every shift where I am engaged—every repairing shift.

25539. Have you any dust accumulating?—Yes.

25540. How often is the dust cleared?—Every night.

25541. Are all the roads in the district where you are working kept clear of dust and rubbish and everything? There is nothing to prevent anybody passing trams?—No. Of course these smaller particles go to the top and on the timber, and so on.

25542. Dust on the timber would not prevent any man passing the trams?—No.

25543. Have you any other improvement to suggest, with the exception of shortening the hours of the examiners and a third examination being made?—Yes, I think his duty should be confined to examining.

25544. What does he do now in addition to examining?—He examines, and he keeps the time of every man and boy in his district. He sees that there is a supply of timber sent in to the workings, and he has to see that everything is kept in repair, and in very many cases he has to superintend and look after the traffic; he has to put up brattice-sheets for the ventilation in the district he is in, and supposing he comes across a door damaged, it would be his duty to assist in repairing that door, so that the ventilation could go on its proper course.

25545. Looking after the ventilation would be a part of the examiner's duty?—Yes.

25546. Is the examiner called out to do something else that prevents him from giving proper attention to the necessary examinations in his district?—Yes, he is called out to the traffic often.

25547. In your opinion his duty should be confined to that of a fireman only?—Yes, and of course I mean now the examination to include his looking after the timber to see that it is properly set, and everything else appertaining to safety.

25548. That is part of his examination in the district?—Yes.

25549. You object to his being called out of the district to attend to other things which are not the duties of an examiner?—That is so.

25550. (*Mr. F. L. Davis.*) The hours in Monmouthshire are 12?—Yes.

25551. Is that so in every case, do you know?—In every case in Monmouthshire. I know some collieries in Monmouthshire where they work more. That is on one shift, only they change alternately from 14 hours one week to 10 hours the next week.

25552. So far as you know that is about the time?—Twelve hours is universal.

25553. Do you happen to know whether the hours are longer in Monmouthshire than Glamorganshire?—I think they are similar in Monmouthshire and Glamorganshire. That is generally so, but there are exceptions.

25554. I think you said that generally speaking you consider the districts were too large?—Yes, in very many cases.

25555. At the present time?—Yes.

25556. Is your district too large?—No, not under present conditions.

25557. I mean where you are working now?—No.

25558. Do you know of any cases where the firemen have complained to the manager of the district being too large, and the management have curtailed it and met them?—Yes I know some cases where they have been applied to and the manager has met them; and I can cite names on oath, if they are wanted, where they have been asked and it is not conceded yet.

25559. There have been cases where it has been brought to the manager's notice and it has been altered?—Yes, in my own case.

25560. You say here that you want two examinations, one before the shift?—As now.

25561. And one after the shift, but a record made of it?—Yes.

25562. It is a fact that at the present time there are two examinations made, but only one is recorded?—Yes.

25563. You want both to be recorded?—Yes.

25564. With regard to the question of ambulance and stretchers and all appliances for first aid, the last witness said he thought that they ought to be kept not at the top of the pit, but somewhere in the pit, and he suggested in the fireman's chest. When you have finished your work where do you have your food—where do you keep your food?—At the entrance to the district.

25565. How far would that be from the working face on an average?—Over a quarter of a mile.

25566. Do you agree with that suggestion, that these bandages and stretchers should be kept there?—Yes, they would be better there than at the top of the pit.

25567. They could be kept free from dust?—Yes, in a box.

25568. To be able to be used at once if necessary?—I might say this: I have taken a general interest in ambulance work myself, and I have bandages in a box now for my own individual use, but I think that ought to be universally provided.

25569. Mr. Abraham asked you about the cleaning of the roads. If there is any accident to a journey of trams, and a lot of coal is turned out on to the road, that is cleared up as soon as possible?—Yes, the traffic is generally impeded. It has got to be cleared to allow the trams to pass.

25570. It is to your interest and the interest of the management that the road should be kept clear?—Yes.

25571. So as to make the traffic coming out as smooth as possible?—Yes.

25572. Can you tell us what would be the average wage of a fireman in Monmouthshire?—Yes, £2 10s. per week.

25573. £10 per month?—Yes.

25574. (*Mr. Enoch Edwards.*) Do they pay them monthly?—Weekly, I get paid.

25575. (*Mr. F. L. Davis.*) I think they all pay weekly?—No, fortnightly in many collieries.

25576. (*Mr. Smillie.*) They reckon their wages by the day?—Yes, 8s. 4d. a day.

25577. That is with the percentage on?—That is the standard.

25578. (*Mr. F. L. Davis.*) Our firemen are paid a standard wage, without any reference to the percentage?—The only reference that applies in our case is this: When the Conciliation Board award 55 per cent. we get 2s. 6d. a week advance on that £2 10s.

25579. It has to get to a very high point before you get anything?—Yes. At 60 per cent. we get another 2s. 6d. a week.

25580. (*Mr. Smillie.*) When miners' wages are coming down, how is it then? 8s. 4d. is the present standard. When they go up to 55 per cent. above the standard you get 2s. 6d. When they come down where do you lose? We do not go below the £2 10s.

25581. You do not go below the 8s. 4d. per shift?—No.

25582. (*Mr. Enoch Edwards.*) I understood you to say that your collieries mostly commence drawing at seven o'clock the morning?—Yes.

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25583. What time do the men go down ?—The pit opens at six.

25584. How long does it take to let them down ?—An hour generally is taken up in putting men down.

25585. The men have to be there at six o'clock in the morning ?—Yes.

25586. They commence to come out at 4.45 ?—Yes.

25587. Does it take them the same time to come out ?—In the morning the pit is not engaged the whole hour. The men do not come in very fast until 6.30. I know that the men can be put down in a little over half-an-hour. If they came to allow the engine driver to go on continuously they could.

25588. If they came at 6.30 they would be down by seven o'clock ?—Yes, or thereabout.

25589. And continues drawing coal till 4.45 ?—Yes.

25590. If they draw them out at the same rate they would be all out by a quarter past five ?—Yes, if the men came continuously, which they generally do at night.

25591. Quarter past five to half past five ?—Yes.

25592. How many hours do you call that a day ?—That is ten hours per day from Monday, but on Saturday they finish at 2 p.m., and Mondays at 3 p.m.

25593. You say you have long days and short days. You say if the men were all there they would commence at half-past six, and that you could let them down in half-an-hour. Assume you work from 6.30 and get them all out at a quarter past five, what do you call those hours ?—Ten and three-quarters.

(*Mr. F. L. Davis.*) They do not begin working till seven o'clock.

25594. (*Mr. Enoch Edwards.*) Have you any boys working under 16 in the pit ?—Yes, we have boys between 13 and 18 working in some of the seams, and they must be 18 before they are allowed in the thicker seams.

25595. Is it ever suggested you cannot keep them more than 10 hours in one day ?—The boys are sent out at the end of 10 hours, or before 10 hours. If I see a boy in late, I generally order him out at once, and out he goes, too.

25596. Do you take care that he goes down last in the morning ?—Yes.

25597. I was wondering what the regulation was, because it seems to me possibly boys may be in the pit infringing the 10 hours a day ?—Generally in Monmouthshire they are very strict about the hours of the boys.

25598. I put it to you if these are the hours as you suggest, it is a reasonable assumption that they go from a quarter past six to a quarter past five in the afternoon ?—The boys, you mean ?

25599. In the pits, the men and the boys ?—Yes.

25600. If an effort was not made, a boy might go in at a quarter past six and come out at a quarter past five ?—He has to be up by then.

25601. If he stays that length of time he is over 10 hours ?—Yes, and he is liable then to be brought up before the management for not acting in compliance with the Act.

25602. You mean that the management is liable to be brought up ?—Yes, and the man who employs the boy, if he does not let him go.

25603. I understand the society you represent consider that eight hours a day is long enough ?—Yes.

25604. You are great believers in the Miners Eight Hours Bill ?—Yes.

25605. Mr. Abraham asked you about the question of dealing with gas. You said if gas was discovered during the working shift, if not great, you diluted it ?—Yes.

25606. What do you mean by "diluted it" ?—Mix pure air with it to make it harmless. You clear it, broadly speaking.

25607. You said if it was not great. How do you measure it ?—Our experience will tell us as to the quantity. Suppose there was a little cavity and a little gas in that, we would have to report that, but it is possible to dilute that in a very few yards from the point of issue.

25608. You said if there is a small quantity you get it out ?—Yes, by erecting a piece of brattice, or something.

25609. You have no special means of measuring the amount of it ?—No, our lamp would not register that.

25610. Examiners are aware that a very small quantity of gas would be more mischievous where you have pure ventilation ?—Yes; I think they are generally aware of that.

25611. Would that be reported in the report book ?—Yes. All gas found has to be reported.

25612. You were asked a question as to your particular districts. What would be the area of your district that you cover in these 12 hours—how many miles do you have to walk ?—I do not know about miles, but the number of working places is between 40 and 50.

25613. When you said you go down to make your first examination at 3.30, and that you finished at a certain time, how long does it take you to get round the first examination ?—From two to two and a half hours.

25614. Of course you are going along leisurely, inspecting and examining ?—Yes—not very leisurely though.

25615. You would not get round if you did ?—In some districts they are very far in.

25618. Would you travel two miles an hour ?—No, hardly that.

25619. You would not do two miles an hour ?—No.

25620. Is that what you mean by going leisurely ?—Yes.

25621. Do you give yourself time to examine the roof and sides ?—Yes. We could not do two miles an hour very leisurely underground, very often in a crouching position. In a seam a yard or four feet high you could not go very leisurely.

25622. Is the examination very laborious work ?—It is very tedious work.

25623. It is too tedious to continue it for 12 hours ?—Yes. The sight must become dim long before 12 hours have elapsed, and the man's brain is not so alert as it should be or could be otherwise.

25624. I observe that you think that the fireman or examiner in your position should hold some certificate of competency ?—Yes.

25625. Not necessarily the same examination as a second-class certificate ?—No.

25626. Ordinarily throughout the country you find that a manager has a higher technical knowledge, as he must have in these days; but the second class is somewhat easy, the examination is not so stiff; but still it is of a practical kind, and for the fireman you want a practical application of his experience and observation ?—Yes.

25627. You would create a new class of certificate ?—Yes, and they should have the preference. I do not believe myself that any man should be engaged after a certain time unless he holds a certificate of this kind.

25628. What class of men are the firemen in Monmouthshire usually selected from—the roadmen, or haulers, or timbermen ?—Colliers and timbermen generally.

25629. Of what age do they select them ?—From about 24 on. I commenced as an examiner at 24.

25630. What were you prior to that; were you cutting coal ?—I was cutting coal, and I had been a timberman as well for a few years.

25631. Do these firemen's wages represent the average wage of a collier ? Are you still paid as the collier, or better paid ?—I think it is a very fair comparison with the wages they are paid to-day.

25632. Do you get full time if the pit is off work ?—We get full time when the pit is not at work, because we have to be at the pit.

25633. You are paid a fixed weekly wage ?—Yes, 8s. 4d. per shift.

25634. If your pits were reduced to three days a week they would continue to pay the examiners for six days ?—Yes.

25635. (*Mr. Smillie.*) What is the time fixed by the Special Rule in Monmouthshire that the examination must be made before the men start work ?—Two and a-half hours.

25636. Are the coal-getters bound to be in at the working face at six o'clock in the morning ?—No, they start to go down at six o'clock. The pit is open to allow persons to descend after six o'clock.

25637. Are they bound to be in at seven o'clock in the morning ?—Yes.

25638. Not before that ?—No.

25639. Therefore the examination of your first working place that you reach in the morning might be three and

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a-half hours before the workman reaches that working place?—Yes, it might be.

25640. I understand that in Wales generally you have what is known as sudden outbursts of gas?—Yes.

25641. And a very considerable accumulation of gas might take place within that three and a-half hours?—Yes.

25642. Some other danger, unseen by the examiner in his round, might be there when the workman goes in in the morning?—A place can suddenly squeeze.

25643. The longer period that elapses before the examiner makes the examination and the men going in, the more danger there is of a thing of that kind?—Yes.

25644. If the examiners' districts were less than they are now he would nor require to start such a long time before the workmen?—No, it could be reduced, perhaps, to two hours or less.

25645. The reason the examination must start at half-past three at the present time is to enable the examiner to cover his district and get out to his point to see the workmen?—Yes.

25646. Your working there is longwall?—Yes, all longwall where I am. It is generally in South Wales.

25647. Does the examiner, from the time he leaves his station and reaches the first working place, go along and make his examination along the working faces only?—No, he has to examine all the roadways as well as face.

25648. As a matter of fact, does he traverse all the roadways out and in which men may have to travel or traffic may have to go on?—He must do that according to rule.

25649. It is not exactly what he must do according to rule; I want to know what he does exactly according to the size of his district. You have fifty working places?—Yes, 48 I have now.

25650. What is the width of them, 17 yards?—Thirteen yards.

25651. Does that include the road head?—That is the working place.

25652. The full working place is 13 yards?—Yes.

25653. You have 48 times that width to traverse in a straight line?—Yes.

25654. Providing they are in a straight line?—They are blocked sometimes.

25655. The probability is that there will be 48 roads leading into those 48 places?—Yes.

25656. The examiner's duty really would be to come out and go in the next road in all those 48 places?—Yes.

25657. If he came out No. 1 roadway and went in No. 2 roadway he would require to come up the full length of that working face?—Yes.

25658. Go down the working face, come back again, come down that road and in that road?—Yes.

25659. Is that usually done?—Yes.

25660. That can be accomplished in a careful examination made in two and a-half hours?—Yes, I should think so.

25661. I suppose in your examination the place in which you must really take the greatest care is the road head—what is called the road head, where the miner fills his tubs?—Yes.

25662. Is there any ripping done? Is your work sufficiently high to make it unnecessary to do ripping of the roads?—We rip in some seams and cut bottom in the others.

25663. You do top ripping?—Yes.

25664. The most dangerous part, as far as gas is concerned, is at the end of the ripping?—Yes.

25665. That requires to be carefully examined?—Yes.

25666. You did not make it clear whether or not your lads generally did get out at the end of 10 hours. Mr. Edwards put that to you. As far as you are concerned, if you find them in the mine at the end of 10 hours you order them out?—Yes.

25667. Do you mean if you find them at the working face?—Yes.

25668. How far might that be from the pit bottom?—In our case it is half a mile.

25669. Would you order a lad a little past 13 to leave the working place by himself and proceed to the pit bottom?—I always tell the butty if there is a young lad like that to go with him. I appeal to his common sense to comply with the Act, and see that the boy is taken safely to the pit bottom, and that the man should accompany him.

25670. Do you always find that the South Wales miner whom you appeal to has common sense?—Yes, I think so.

25671. Sufficient common-sense?—It is only in a few cases we have to complain about those lads being in.

25672. Does not this mean in every case where a lad is working with a grown-up person at the coal face that the grown-up person as well as that lad must be out of the pit within 10 hours?—They have to be out by 5.40, to allow shot-firing to commence. There is a Special Rule at our place.

25673. That is far more than 10 hours?—Yes, they work 10 hours, as a rule, coal getting, but they have until 5.40 to get out of the pit.

25674. (*Mr. Wm. Abraham.*) Did you say work 10 hours at coal getting?—That is on four days of the week, and then they work seven hours on Saturday and eight on Monday.

25675. (*Mr. Smillie.*) You know that the lads shall not be underground more than 10 hours?—Yes.

25676. Is it not a fact that some of your lads are not out of your pit within the 10 hours?—In very few cases. I have had cases in my experience as an examiner where I have had to reprimand men for not sending them out, and they have had to appear before the management.

25677. What is the proportion of lads under 16 to 100 men in your colliery. Is it 10 per cent?—I should say it is a little more.

25678. Are those lads engaged chiefly at the coal face?—Yes, with the men getting coal and filling the tubs.

25679. Almost invariably those lads are out within 10 hours?—Yes.

25680. It means that the man with whom they are working must also be out within the 10 hours. Is that so?—Yes. Supposing you and I were working together in adjoining places, if you had a lad working with you and I had a lad working with me, perhaps I could not leave my place immediately, but I would send my boy with you.

25681. That would be all right if one man took two or three lads. Is that the method by which it is secured?—Yes, very often the man goes with the boy. They generally get enough work within the 10 hours, and they are generally gone. There are a few cases where we have had to complain.

25682. You complain that the lads are not amenable to discipline. How often have you found them on the road where they should not be and ordered them to go to their working face?—That is in the morning.

25683. Sometimes their father, or the men with whom they may be employed, tell you that you have no business with that?—I have had that told me before now.

25684. That is not generally so?—No.

25685. Some person says that to you?—Yes.

25686. Do you think that the officials should have some power to enforce their position in a case of that kind?—Yes.

(*Mr. Ratcliffe Ellis.*) You have a Special Rule by which a person is liable to be brought before the magistrates.

25687. (*Mr. Smillie.*) They are really under your orders at the present time?—Yes; there is nothing in the rules stating to that effect.

25688. You are an official of the mine, really?—Yes.

25689. The lads and the workmen from your district in the meantime are under your charge?—Yes.

25690. And they should be amenable to your orders, really?—Yes, that is it.

25691. You find sometimes that they are not amenable to your orders, and some impertinent person will say you have no business?—Not myself only. Of course I have heard this mentioned many times to my colleagues.

25692. They seem to feel that the deputies have no right to order them away?—Yes.

25693. You think that interferes, to some extent, with the discipline of the mine?—Yes.

25694. Have you any foreign workmen employed in the mines in Monmouthshire, so far as you know?—No.

25695. Do you think that the discipline of the mine in which you are employed would be better carried out if the

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workmen at the coalface did not understand the English or the Welsh language ?—In Monmouthshire there are not many Welshmen engaged.

25696. They are mostly English ?—Yes.

25697. English-speaking ?—English-speaking Welshmen, as you might term them.

25698. Supposing 100 men in the 48 places you have under your charge did not understand English or Welsh and you did not understand pigeon Russian, or whatever they speak, and Russians were employed, do your think that would tend to safety and discipline in the mine ?—No, I do not.

25699. Supposing a workman you advised in the morning as to the condition of the place could not understand you, do you think that that district would be considerably safer than it is at the present time ?—No, it would not be so safe.

25700. It would not be so safe ?—If a man could not understand what I told him I do not think it would be as safe.

25701. I am putting the question to you not from the point of view of your district, because you have not many foreigners, but it has been said that foreign workmen, who do not understand the language, are more amenable to discipline than our own British workmen. I want to have your opinion.

(*Mr. Ratcliffe Ellis.*) More amenable than the Scotch.

25702. (*Mr. Smillie.*) I find some of the Welsh people are not amenable, because they have refused to accept the advice of our friend. Who do you think should be most concerned—I am asking you this as a miner of long experience—in the drafting of Special Rules for the safety of the men underground. Should not the workmen whose lives are at stake be chiefly concerned in the drafting of Special Rules for the safety of the men underground ?—They should be on that Board.

25703. And next to them probably the examiners who have to carry out those Special Rules and look after the safety of the men ?—Yes.

25704. May I take it, in your opinion, and in the opinion of the firemen of Monmouthshire and South Wales, that the firemen from the safety point of view are the most important class of workmen ?—Yes.

25705. You think even to a greater extent than the manager who may not visit the mine more than once a day or once a week. You think that the firemen are more important even than the manager, so far as safety is concerned ?—I think they hold the most important position underground.

25706. Do you think, so far as the safety of the workmen at the face is concerned, that they should be consulted in the drafting of the Special Rules ?—Yes.

25707. And that the firemen also should be consulted ?—Yes.

25708. If Mr. Ellis is correct that his proposal is the best, that the employer should, in the first place, initiate or propose rules to go before the Home Office to which the workmen or any person could object and ultimately go to arbitration—if that were admitted would the workmen not have as good a right to initiate and propose rules to the Home Office without the employer having the right to object ?—Yes, the workmen should have every facility, and every other branch, to oppose any rule that they did not think well enough of.

25709. There are three methods with regard to these Special Rules. There is the method suggested by you, that the employer, the mines inspector, and the workmen, through their representatives, and the deputies should jointly hold a conference and come to some special safety rules.

(*Mr. Ratcliffe Ellis.*) Try to.

25710. (*Mr. Smillie.*) Yes, endeavour to come to what, in their opinion, was the best rule for safety. If they failed then some other rule would have to be made. Another method is for the employer, after having fully inquired into the matter, to propose rules and send them to the Home Office, and if the Home Office approves they could be sent back and anyone would have a right to object. The third method is the workmen, whose lives are concerned, should initiate and propose rules, send them to the Home Office, and the employer could object. These are the three methods. Your idea is that a joint conference in the first place, would be the best method ?—Yes, it would save a lot of delay.

25711. Do you think, if Special Rules were adopted by a joint conference, that they would be more likely to be observed and carried out than if forced practically upon the workmen against their will ?—Yes.

25712. Do you think it would be an advantage if the lads attending public schools in South Wales had some instruction on mining, and the nature of gases, and the danger by which the lives of miners were attended underground ?—Yes.

25713. The probability is that 80 or 90 per cent. of the lads attending the schools in the mining districts will become miners ?—Yes.

25714. Do you think it would be an advantage if the lads had some training as to the dangers with which they would be surrounded in the mines ?—I may tell you in Glamorganshire that course is adopted, but it is not universal.

25715. Do you think that that would be an advantage to the lads ?—I should make it universal in every mining district.

25716. Do you think it would tend to greater safety and discipline underground ?—Yes.

25717. If they had some knowledge of the dangers by which they would be surrounded ?—Yes.

25718. (*Mr. Ratcliffe Ellis.*) You would make it obligatory. Is that on the parents of the boys ?—It is down in the code in Glamorganshire.

25719. You would have it part of the code in public elementary schools ?—Yes, in every mining district, I should think.

25720. (*Chairman.*) You have in your mine 10 examiners and two deputies. I thought you explained that a deputy was merely a person who took a fireman's duty when the fireman was away, but you seem to have two permanent deputies. What do those do ?—Those deputies I mentioned here work a part of the shift and help, as it were, in the morning. We call them deputies. It is another name for assistant firemen.

25721. They only do part of the work you do, and I suppose they do not get the same pay ?—No, to make it clear, the reason that plan is adopted is this. I mentioned some time back that there was one seam in our colliery where they do do shot firing in the shift, only being a damp seam they have had an exemption from the inspector. There is no shot-firing at night, and, of course, the one examiner can proceed with his work much quicker. They have two men engaged in this seam all day and one at night as an examiner, and then this man coming in the morning to assist him on his last examination.

25722. One examiner has an assistant with him ?—Yes, in the morning.

25723. To help him do his work ?—Yes, and to report for himself.

(*Mr. Ratcliffe Ellis.*) Shall I ask Mr. Evans if he agrees with the evidence of this gentleman. I notice there is one thing he says in his statement, that is that the men should be required to buy their explosives from the owner. That is the only addition he has to make to the witness's evidence

(*Chairman.*) Would you like to make a statement, Mr Evans ?

(*Mr. Evans.*) Yes, my lord.

Mr. JOHN HENRY EVANS, called and examined.

STATEMENT OF WITNESS.

Mr. John Henry Evans

25724. (1) Discipline within recent years has been much better, but the recklessness of many of the workmen in disregarding the rules, and in some cases the laxity of officials in enforcing them, and their disregarding also of them is the direct cause of many preventable accidents.

(2) The long hours worked by the colliery examiner which in the majority of cases are 12, are such that they cannot supervise so keenly the last few hours of the working shift, therefore, discipline is not so good, and I believe great assistance would be given if the representatives of the workmen impressed upon them that it is part of their duty to obey instructions given

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and assist in keeping good discipline. Something should be done to prove that men are practical workmen, when they apply for employment in different branches.

(3) Colliers should do all the propping and timbering of their working places, sooner. Propping should be done immediately after the roof is exposed, and more attention should be given by the workmen to better and proper packing which can best be enforced, if necessary, by frequent visits to a workman's place by the official in charge.

(4) Workmen's inspection according to General Rule 38 has done a great deal of good in satisfying the workmen as to the safe condition of the mine, and is carried out in the majority of collieries.

(5) Shot-firing in my opinion ought to be prohibited during the working shift. It should be permitted only where coal shots have to be during the shift, and that under special condition. All shots should be fired between shifts by a man specially appointed. I think it should be made compulsory on the men to get their explosive from the owner.

25724A. (*Witness.*) I am examiner at Lewis Merthyr Colliery and represent the Monmouthshire and South Wales Colliery Examiners' Association. There are two or three suggestions which I do not think my friend Mr. Powell has made quite clear to you. The last one particularly is this one, the question of the assistant. One thing we condemn in South Wales very strongly is that this man, that is, the assistant fireman, does not accompany the fireman, but he does a part of the district of the fireman, which is too large for the fireman to do within the time allotted. They have made inspection previous to the shift. There is a supervision of all these places where the man has inspected in the morning and the fireman has to take charge of those men, and part of the district that he has not inspected. This we say is very wrong. We suggest that every man that makes the inspection previous to the shift should be responsible for the men working in that particular district during the shift of working.

25725. (*Mr. Ratcliffe Ellis.*) The man who makes the inspection before the men go to work should make the necessary inspections, whatever they may be, during the time the men are at work?—And supervise the men.

25726. That would make a very long day?—No; in the majority of cases in South Wales there are too many places allotted to one fireman or deputy to make the inspection according to the Act; therefore, he must get a deputy to inspect his places.

25727. In point of time, whatever size the district is, he must be down two and a-half hours before the men, and if he stops down all the time the men are down, if the men are down 12 hours it would give him about 14 hours?—This is the point I want to be quite clear upon. I have to be responsible for the safety of those men during a part of the shift when I have not inspected their places.

25728. Supposing you relieve the first man and come on the second fireman?—We ought to get our district so allotted that we could make the inspection ourselves. I should not be able to make the inspection.

25729. That means that the district should be reduced in size?

(*Mr. Smillie.*) Supposing he has 70 places he can only make his morning examination for 50, and another person has to make it for the other 20. Immediately after that examination the whole 70 are under the fireman.

25730. (*Mr. Ratcliffe Ellis.*) It comes to this, the district is too large?—That is the point.

25731. (*Chairman.*) You object to this system of deputies altogether?—Yes.

25732. You would have everybody full examiners?—I object to the system of deputies.

25733. (*Mr. Ratcliffe Ellis.*) The district is too large for one man to look after?—Yes.

25734. Is there anything else in Mr. Powell's evidence which you do not agree with?—I wish to say something else.

25735. (*Chairman.*) On the matter of deputies, do you speak on behalf of the Association?—We are speaking on behalf of the Association.

25736. Mr. Powell and you. Mr. Powell does not object to this system of permanent deputies, but you do?—Yes.

25737. Which of you represents the Association?

(*Mr. Powell.*) I was not asked that, my Lord.

(*Chairman.*) I understood that if you had objected to the system of deputies you would have said so. I may take it you both agree as to that?

(*Mr. Powell.*) Yes.

(*Witness.*) There is another point in connection with the hours worked. During the hours worked by the colliery examiners we think, and we practically know, that we are not doing justice. We know that we are not doing what we would like to do for the safety of the men.

25738. (*Mr. Ratcliffe Ellis.*) You think that they ought to be reduced. Both physically and mentally they are too great a strain on a man to do his work satisfactorily. You think that they should be reduced to 8 hours?—Yes.

25739. That is your view, and Mr. Powell has said that too?—Yes, that is my view.

25740. Have you anything to say with regard to the question of timbering? In your statement you say colliers should do all the propping and timbering of their working places sooner, and that propping should be done immediately after the roof is exposed, and more attention should be given by the workmen to better and proper packing, which can best be enforced, if necessary, by frequent visits to a workman's place by the official in charge, that is to say, the colliers ought to do their propping sooner, and not wait till the roof comes down?—According to the rule of South Wales there is a uniform system of timbering at the coal face, but inasmuch as only one examination is required, and only one can be done by the time allotted, the possibility is that the worker risks it and does not put it up at the stipulated time when it is exposed.

25741. The collier is apt to be negligent, and wants more inspection?—A keener inspection.

25742. A reduction of the districts would bring that about?—A keener inspection.

25743. Then you say that workmen's inspection, according to General Rule 38, has done a great deal of good in satisfying the workmen as to the safe condition of the mine, and is carried out in the majority of collieries?—Yes.

25744. Have you anything to suggest by way of altering that?—Yes, I would suggest that some pressure should be put in some way or other and get the workmen to do this in some collieries; I am sorry to say it is done only once in every six or twelve months.

25745. What pressure do you suggest should be brought on the workmen to do it?—I think there should be something in the Special Rules almost compelling them to do it once every three months.

25746. It the workmen do not do it now, do you think that they would do it any more if there was something in the Special Rules?—I believe if there is something in the Special Rules that when the inspection was done by the men—the difficulty is this, that the men have to pay themselves for inspecting—if there was something done by the State or some other source to pay a part of these men's wages, undoubtedly, it would be done oftener.

25747. Do you think the difficulty now about making these inspections is because there is no fund to pay the men?—It is adding the cost on to the men.

25748. Do you think that is an objection?—To some extent it is.

25749. To what extent—is it a large extent?—It is in this way: in large collieries, undoubtedly, it would be a great expense to do it according to the Mines Act once every month, and the men are not in many cases paid at the high standard of wages for doing that work.

25750. They are not paid adequately for doing it?—No.

25751. Do you think their not doing it arises from fear of the consequences?—Yes. Perhaps so.

25752. Have you known where reprisals have been made because a man had made an inspection and made a bad report?—I hardly think it is fair.

25753. Have you known such cases?—Yes, indirectly undoubtedly, it has been done.

25754. Very indirectly?—Yes.

25755. (*Chairman.*) Do you mean by "indirectly" that a man has been sent away and you cannot trace his being sent away to his report?—It is in this way not direct: you dare not do it direct, but undoubtedly, in my opinion, cases have happened.

25756. People have been mysteriously given notice that their services are not required any more?—No. It is a question, I think, I should hardly answer.

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25757. (*Mr. Ratcliffe Ellis.*) You do not feel that you ought to give any information as to where this has happened or the extent you would go. You think there have been cases where the men have suffered in consequence of making a bad report. Is this examination usually made by the workmen in the mine?—Yes. Perhaps so.

25758. Do you think that is desirable?—Yes.

25759. They know more about it than anybody else?—Yes.

25760. You would not give the right to make the inspection to any other persons than those employed in the mine?—No, certainly not. I believe the inspection ought to be done by the men in the mine.

(*Chairman.*) At present, the men, if they choose, can appoint a man from another mine.

25761. (*Mr. Ratcliffe Ellis.*) In his view it is not desirable, he says. You think that this inspection is best done by people employed in the mines being inspected?—Yes.

25762. You think it desirable that it should be more used?—Yes.

25763. You think one reason is that the men are not sufficiently paid, and another may be that there is some fear that there might be reprisals if a bad report is made. That is your view?—Yes.

25764. Shot-firing, you agree with the last witness, ought to be done between the shifts?—Yes. There is one point upon which I differ from my friend. I do not agree as to shot-firing in the coal.

25765. You would always have that done between shifts?—I do not believe in shot-firing in the coal at all.

25766. But where it has to be done it would be inconvenient to do it between shifts?—Yes.

25767. You speak rather as to the haulage roads, the main roads?—I do not believe in shot-firing in the coal in dusty and fiery mines, in gaseous mines at all, because they are the greatest danger, in my opinion.

25768. You think the explosives purchased ought to be supplied by the owner, in order to secure proper explosives?—Yes.

25769. Is there any other statement you wish to make to the Commission?—Yes. I should like to say a few words with regard to the hours of working. I believe something should be done with regard to making a second inspection during the working shift compulsory. Again, we have adopted at my collieries working three shifts of firemen, and we have found this system very successful, and we have brought colliery accidents to a minimum.

25770. You only work eight hours. Your firemen only work eight hours?—A continual supervision of eight hours each shift, but our work does not quite finish at the eight hours. Our supervision of the mine is eight hours each, that is in the face and the workings. Any office work, such as booking, we do after leaving the shift.

25771. You have to add half-an-hour on to the eight hours?—Yes, half-an-hour or three-quarters of an hour.

25772. (*Mr. Wm. Abraham.*) I think it is worth while that the Commission should know how these three shifts are worked in practice, so that we may see the effect of it. Will you make a statement as to that?—This is the way we work. According to the Coal Mines Act we are required to go down two and a-half hours previous to the shift. We are down the colliery from 4 to 4.30 in the morning. We make our inspection previous to the shift, and then we are up the shaft about 6. We inspect the lamps till 7. We go down at 7 o'clock and right into the colliery face with the men: we are practically in the coal face supervising the men at the same time as they start. We make an inspection again. After I have made my inspection I am back at 12.30 to 12.45, or a shade after. I am not leaving my district until the fireman comes down at 12.30 or 20 to 1. He comes in to the point of the district and in this case has charge from me and starts to make another inspection. The majority of accidents in our colliery happen in the last few hours of the shift. When the second fireman is coming on he is coming from the top with good eyesight and good hearing, and he is coming into the face to inspect the timber set during the morning, and any mistake he is able to see which a man would not see when he was exhausted, but this man is full of energy. By that system we believe we have brought our accidents down to a minimum point. During the last three years we have only had one fatal accident in the mine and one broken limb.

25773. (*Chairman.*) From falls of roof and sides?—Yes, again at 9 o'clock at night, or 9.30 these men would inspect the day shift previous to the night shift. There would be another man coming down at 9 o'clock at night again.

25774. (*Mr. Wm. Abraham.*) Your great point is this, that a fresh man examines these districts when the men are exhausted?—When the men are exhausted this man comes from the top full of energy and can see any difficulty or danger, and he can see things quicker than men who have been working hard all day. I believe we have reduced the accidents to a minimum point.

25775. You have only had one fatal acoident during the last three years?—Yes.

25776. (*Chairman.*) In your particular mine?—Yes.

25777. How many are employed?—In the particular pit where I am, 1000.

25778. In that pit, 1000?—We have only had one fatal accident in three years and one broken limb.

25779. (*Mr. Wm. Abraham.*) You would advocate that three shifts should be made compulsory in our mines?—Yes.

25780. (*Mr. Smillie.*) You would not require three shifts if no workmen were at the face?—We are talking as the mines are now. I say we require three shifts. Then with regard to the workmen, I think something should be in the Special Rules compelling a workman when applying for employment from one colliery to another to prove that he was a practical workman. If he applied for cutting coal, he would have to prove that he had been a collier cutting coal, or the same with any other branch. I believe, in my opinion, that it would reduce the accidents. The only accident we have had was a man who came in without our knowledge, and not being a collier. He got killed on the third day, and we found out that he had been a labourer before.

25781. (*Mr. Ratcliffe Ellis.*) Would you have any objection to being submitted to a medical examination also?—Well, no; no objection to a medical examination, although it is not always necessary.

25782. You never can tell; supposing he was suffering from nystagmus or something of that kind?

25783. (*Mr. Enoch Edwards.*) I understood you differed from your friend on this interpretation of the deputies. You object to deputies altogether?—Yes.

25784. The term "deputy" has been suggested to us as a sort of assistant fireman?—Yes, the deputy would be an assistant fireman.

25785. How many firemen are there at this colliery, where you employ 1,000 men?—There would be 18.

25786. You are working in eight-hour shifts?—Practically.

25787. In the case of accident to one of you, or illness, which happens to firemen like everyone else, how would the Company carry out the eight hours if there were no deputies?—They would have to substitute someone else.

25788. Who are not firemen?—Exactly like putting a fresh man on. Experience would show the Company that the man was capable of carrying out the duty, and they would substitute that man in the place for the time.

25789. I was putting to you whether you had overlooked that practical difficulty, that a deputy or two about the pit may be in the interests of the men themselves, who are firemen who met with sickness, and also in the interests of the Company, too. The creation of other firemen might not be the best of things for the firemen, but you object to anybody being employed at all above the number?—No, it is in the interests of safety.

25790. Your friend who gave evidence before said that they had ten firemen and two deputies. The deputy does the work over the area the firemen should cover. They are assistants to the firemen. If there are no men about the place there are 18 of you who must, to carry out your eight hours system automatically, depend on John Jones coming on that shift, and Thomas Jones on the next, and William Jones on the next. In the absence of any deputies there is no one to take your place. How will you make your eight hours?—In this way. On the question of deputy firemen there ought to be a distinction between that and a brattice man. In the whole of Glamorganshire a fireman has a brattice man, who in a sense is a deputy to a fireman.

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Mr. John Henry Evans

27 June 1907

25791. Do not concern yourself about brattice men. Are you well advised in your strong objection to there being a fireman or two at the colliery more than there is immediate employment for in your eight hours?—That is for the employer to look at. What I object to is this: the deputy doing a part of the inspection previous to the shift commencing work, and that supervision handed over to the real fireman for the day's work.

25792. For that reason you object to the deputies altogether?—Yes.

25793. (*Mr. Wm. Abraham.*) That kind of work?—That kind of work.

25794. (*Chairman.*) If a fireman is ill you do not object to somebody being appointed previously in case the fireman cannot perform his duties?—Certainly not.

25795. You have 18 firemen. If one of you is ill you would not object to a man being appointed to take his place?—Certainly not.

23596. In case he should fall ill?—Yes.

25797. (*Mr. Enoch Edwards.*) Do you suggest if one was ill one would work two shifts?—No, it is not allowed.

25798. But you have a compulsory eight hours?—So far as our collieries are concerned.

(*Mr. Enoch Edwards.*) It struck me that if you object to these deputies there might be a difficulty in finding firemen competent to do the work. In your report you are good enough to say that workmen's inspection carried out according to Rule 38 has done a great deal of good. You also say that it is carried out in the majority of collieries. It is the first time we have heard that. We gathered from the inspectors in your district that this examination of collieries was almost a dead letter. I think that is the evidence.

(*Mr. Ratcliffe Ellis.*) I do not think so in South Wales. Some of the inspectors said it was a dead letter in Lancashire.

(*Mr. Smillie.*) Mr. Tom Richards said so.

(*Witness.*) It is practically taken up in the whole field of Glamorganshire.

25799. (*Mr. Enoch Edwards.*) Although they do not do it every month?—They do it some time in the year; some every month, some every two months, some three months, and some six months.

25800. You say it has worked very satisfactorily?—Yes.

25801. As to the employer finding the explosives, what do you mean by that?—There should be only one class of explosive used, and there are cases undoubtedly where the men are allowed to buy the explosives from different people that are supplying them. The hole would be bored 1¼ inches when they had the powder practically too large for the hole. Again, where the holes are 1¼ inches they would get the powder or ball supplied 2 inches. There is a risk in people trying to force a ball powder into a hole which is not so large.

25802. I understand that, but I am not asking you to elaborate that. Usually in the country the employers find them, and they are stored at the collieries?—Yes.

25803. Do you suggest for those reasons that they should be got from the company?—Yes.

25804. That would obviate men storing them in their cottage homes?—Yes.

25805. You do not say anything about who is to pay for it?—Of course that is another point. That is entirely a different point.

25806. It will lead me to what I want to ask you. You think they should be obtained from the firm?—Yes.

25807. The suggestion is that they are got from somewhere else. It is a question of price when they are got from somewhere else?—Not in all cases.

25808. Why are they got from somewhere else?—On account of the men themselves thinking that they could in some cases get them cheaper.

25809. There must be some underlying motive; human nature is alike everywhere. If the colliery company supplied the explosive, the men want it at the same price as a man keeping a store, what could be the object of buying it from the store-keeper?—

(*Mr. Ratcliffe Ellis.*) Perhaps it would be absence of common sense.

25810. (*Mr. Enoch Edwards.*) I want to know whether there is anything in the colliery people charging the man a higher price than he could purchase it elsewhere?—As far as the question goes, I am not prepared to answer that.

25811. There must be some reason for it?—Undoubtedly there is. It would avoid the storing of powder in the mine. The shot-firers would know the amount of holes to be fired, and could fetch that from the magazine, say at mid-day, and carry only what was required into the mine. Where the men are there is a lot of powder in the mine that should not be there.

25812. (*Mr. Ratcliffe Ellis.*) You are not allowed, under the Explosives Order, to store powder in a mine?—They take it in during the shifts, and if 80 places have five pounds each there would be a lot in the mine.

25813. (*Mr. Enoch Edwards.*) They might leave that for the next shift?—They might leave some.

25814. If supplied at the colliery it would not be down?—It would not be down the pit practically one-third of the time.

25815. (*Mr. Smillie.*) The brattice man you call in some places the roadsman or assistant?—We call them brattice men.

25816. They do timbering and redding, and other work under the supervision of the fireman?—Not in Glamorganshire—nothing but directing doors and seeing to the ventilation through airways and that those things are right.

25817. They are men able in an emergency to take the place of firemen?—We have plenty of them. We have two or three first-class brattice men gaining experience to become firemen, and so on, up to the top of the pole.

25818. You have no objection to this class of man, but only the method by which the deputies are at present employed?—Yes.

(*Mr. Powell.*) I quite agree with my friend. We do object, as he has stated, to a deputy examining a part of the shift of a district and not reporting. That is what you mean?

(*Witness.*) Yes.

(*Mr. Powell.*) These deputies I told you about do report. They sign their name on every report they make. If they examine only one or 10 places they sign for it.

(*Mr. Wm. Abraham.*) That is perfectly understood.

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THIRTY-SEVENTH DAY.

Tuesday, 9th July, 1907.

PRESENT.

Lord MONKSWELL (*Chairman*).

WM. ABRAHAM, Esq., M.P. (Rhondda).
F. L. DAVIS, Esq.
ENOCH EDWARDS, Esq., M.P.
THOMAS RATCLIFFE ELLIS, Esq.
JOHN SCOTT HALDANE, Esq., F.R.S.
ROBERT SMILLIE, Esq.
S. W. HARRIS, Esq. (*Secretary*).

Mr. WILLIAM BROWELL CHARLTON, called and examined.

STATEMENT OF WITNESS.

Mr. W. B. Charlton.

9 July, 1907.

25819. (1) The evidence I wish to give will be confined to:

What steps could be taken for the better prevention of accidents from winding and haulage.

The Federation of Enginemen's Associations have for 25 years urged that for the better prevention of accidents from winding and haulage, the Government ought to force all persons before being placed in charge of engines, to give evidence of their fitness by test to eyesight, hearing, that they have no mental or bodily infirmity, that they are of good moral character, and have a practical knowledge of the construction of engines, and that they have had a period of preliminary training in some kindred employment, thus preventing accidents like the following:—

(2) An inquest was held on the death of William Hutchinson, miner, Hummerbeck Colliery, Durham, in April last year. In the verdict the Jury expressed the opinion that the person in charge of the engine was not a capable brakesman.

(3) I attach a copy of regulations* enforced by the Durham Enginemen on all persons seeking membership and it is generally admitted that such stipulations, as are here given, have resulted in a very efficient staff of winding and hauling men being employed in the County of Durham. The enforcement of those regulations rests with the Enginemen's Association, and sometimes much friction and bad feeling is created between the management and the enginemen. We urge that the Government should claim to be satisfied as to the fitness of persons placed in those important positions.

(4) If keeps were used under the cages while men and boys were getting in and out of the cages a very prolific source of accidents would be abolished. If keeps had been used in the case already quoted the man Hutchinson would have been spared, for when the cage moved away, after the first three men got out, the cage would have reached the keeps and rested level with the getting out point, but there were no keeps in and the man was caught and fell down the shaft. If keeps had been used in the Boldon Colliery, Durham, case in August last, when three men fell down the pit 255 fathoms, the opinion of the Jury was, that two of the men would have been saved. Keeping the cages steadfast while the weight in the cages are varying by the men getting in and out is one of the most taxing moments for a winder. If keeps were used and the cages rested, then, with an adequate brake, there would be a reasonable guarantee that the cage would not move until desired.

(5) The practice of persons signalling themselves away from the shaft bottom, and from seams in the shaft, is dangerous, for the person must signal the cage to be taken away before he gets in. In many cases the engineman has to calculate upon what time should be allowed. The danger is increased in those instances where it is done when enginemen do not know. Usually this occurs during the night shift between the large groups or shifts of men being changed, when the datal men, horse-keepers, men doing repairs, etc., are passing from one seam to another. This is a growing annoyance to enginemen and source of danger.

In August last Whitfield Ridley, Bebside Colliery, Northumberland, was injured and died immediately after. He was able to tell his brother that the engineman was too quick for him, he did not give him time to get in after he had signalled. I remember some time ago a case where the person had signalled away, and in stooping to get in the cage after he had signalled, the slot, which is used to keep the tubs in position, got in between the collar of his jacket and his neck and detained him there until the cage went away, killing him on the spot, no one was near or this could have been prevented. This is a source of much anxiety to enginemen, who are responsible for the safe raising and lowering of men and boys.

(6) The shortening of the hours of winding-men's shifts is imperative if greater care is demanded from them. In Durham County there is a universal eight hours' day for winders. But in practice the 24 hours is divided into seven, eight and nine-hour shifts. The seven hours cover that portion of the day in which the bulk of the men are changed and the pit is busiest with coal drawing. The eight hours cover the remaining three hours coal drawing and changing the men, whereas the nine hours cover the portion given only to waiting on and changing men.

After 30 years' experience in winding at the largest collieries in Durham, one thing I know is that no man can exercise that tension and energy in the management of winding machinery for 12 hours that he can during eight hours. The most alarming accidents in overwinding have occurred in the fag end of the 12-hour shift, or even a longer shift. Winders have no cessation, no meal times. It is one continuous strain, and, remembering what Sir Lindsay Wood said in 1897 respecting the work of winding enginemen, it is a little surprising that some relief has not come in the shape of parliamentary shortening of their hours.

Sir Lindsay Wood told us in 1897 that there were 550,000 persons employed underground in the mines, and he estimated that the cages would make 200,000,000 journeys per year. The speed in some portions of the shift is at the rate of 40 miles per hour, with a total weight of 18 tons. There are few trades which are so taxing and trying to the energies and which make such heavy demands upon the mental powers of workmen as the winding engines at our collieries. This being the testimony of so competent an authority we urge that the Commission will enforce an enactment limiting the hours that winders are to work at eight per shift.

(7) We ask the Commission to do something to prohibit single individuals being sent into the mines alone to attend pumping engines and electric motors, etc., during week ends, and at night time when the pits are to be idle the next day. Men are compelled to go down often to some out of the way place in the mine to an engine beyond the possibility of communicating to any soul, no matter what may happen.

* See Appendix I.

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Mr. W. B. Charlton.

9 July, 1907.

25820. (*Chairman.*) I understand you are the Chief Agent in the Union of the Durham County Enginemen ? —Yes.

25821-3. You belong to the National Federation of Enginemen's and Boilermen's Associations of Great Britain ?—Yes.

25824. You have been employed continuously as a colliery winding-engineman since 1876 until 1906; you have had 30 years' experience yourself in winding ?—Yes.

25825. You represent this National Federation ?—Yes.

25826. You express the views that the majority of the members hold upon this question ?—Yes.

25827. For 25 years your Federation has urged with the Government that for the better prevention of accidents from winding and haulage the Government ought to force all persons before being placed in charge of engines to give evidence of their fitness by test to eyesight, hearing, that they may have no mental or bodily infirmity, that they are of good moral character, and have a practical knowledge of the construction of engines, and that they have had a period of preliminary training in some kindred employment ?—Yes. The National Federation have done that in the shape of urging a Bill claiming that all persons employed as engine tenders and boiler tenders should pass an examination and give evidence of fitness. Five times that Bill has passed its second reading.

25828. When did it pass its second reading, what dates ? —I could not give the dates.

25829. Was it after the Special Report from the Select Committee on Steam Engines and Boilers (Persons in Charge) Bill ?—It has not passed the second reading since then.

25830. The reason being that the Select Committee reported against your Bill ?—The Bill that was considered before the Select Committee provided that men employed at mining engines, at factories, and all other kinds of engines in the country, should pass a similar examination and give evidence of fitness. We have drafted a Bill since then specially relating to collieries. The Bill we are now urging is relating only to men employed at colliery engines and boilers.

25831. In the Report of this Select Committee there is this paragraph: "Your Committee are of opinion that the provisions of the Mines Regulation Act, 1887, the general rules incorporated with that Act and the special rules which are fully detailed in the evidence of Mr. Ellis (Questions 2210—2220) are admirably adapted to secure the selection of competent persons for taking charge of engines and boilers, and for fixing the responsibility in the case of mines." The Committee were satisfied that the Act and Special Rules went far enough, and did not propose to Parliament that your Bill should be passed. Why were you not satisfied with these provisions ?—General Rule 24 only provides that the man that is to be in charge of an engine for the purpose of drawing men and minerals from the mine should be a man 22 years of age, a suitable person in the idea of the manager. If the manager says a person is competent there is an end to the question; the rule reads "In any mine which is usually entered by means of machinery, a competent male person not less than twenty-two years of age shall be appointed for the purpose of working the machinery which is employed in lowering and raising persons therein."

25832. There were certain Special Rules detailed in the evidence of Mr. Ellis which the Committee considered were admirably adapted to secure the selection of competent persons ?—Yes.

25833. Have you read those rules ?—We perceive that the Special Rules vary in districts. We do not know anything in the Special Rules that would result in securing a more competent man than Rule 24 of the Mines Act. It does not enforce any stipulation other than the 24th Rule.

25834. These Special Rules were, at all events, intended to go a little further than General Rule 24 ?—What they might be intended to do I do not know, but I have not seen, as one who has observed those things, where it does enforce from men more than what the Act does.

25835. This General Rule says merely "some competent person." There is no definition of what a competent person is ?—To illustrate my point—I just want to be understoood, that is all—I have submitted the Regulations in Durham which the Enginemen's Society have very fully, shall I say enforced—I say enforced so far as we as enginemen have been able to. We to-day have a request before the county owners, and one of the offers made is made conditionally, and this is the clause—I do not want to name the concession: "This concession to be subject to the condition that an agreement is come to by which enginemen will undertake to teach any man whom the owners may select for that purpose." This is our point, and it will perhaps illustrate the matter now under consideration. We think that competent winders ought to have a preliminary training that will make them ready to effectually deal, not only with anything that may take place in his engine, but if any matter intercepts his efficient working from the boilers which are immediately near, that that man would be competent by reason of his prior training to take in at once what is the matter in regard to steam failure or any other interruption coming as the result of forces outside. We have made it imperative that a man seeking to be a winder, a colliery engineman, shall go through this preliminary training that he may be easily competent to grasp anything that may take place.

25836. Have you succeeded in enforcing your rules in the County of Durham ? Are only members of your Association employed ?—Very largely so. It has been accepted now mutually between us and the owners. We do not train anyone, neither can we, except the manager or the engineer nominates and signs a permission, so that in that respect it is mutual; but some of them resist it.

25837. Do you wish to keep this Association in any way a close corporation ? Would you leave it to the managers, with the consent of the men to be taught, to settle the number to be apprentices ?—We say that is an aspect that may be reasonably got out of the assumption, and that is why we are urging that the Government should undertake to be assured that the men placed in those charges are competent men and not the Durham Enginemen's Society.

25838. That is my point. Mr. Ellis will, no doubt, bring it out afterwards, but the suggestion on behalf of the owners is that you would make engine winders a close corporation; you would seek to limit the number of apprentices ?—I will say this in reply; I do not know a single application that has come jointly from the manager and the men at the colliery that has been refused by the authority that now has this matter in hand. During the last 18 months we have given permission to 75 men in our county to be taught to wind, and 63, I think it is, to be taught to haul underground; that is the whole of the applications.

25839. You have not yet refused any applications ?—No.

25840. Are you satisfied with the state of things in Durham ? If what is the practice in Durham was carried out throughout the mines of the United Kingdom would you be satisfied without a Bill, or do you still think the Bill would be desirable ?—I only put this forward as showing the direction in which we are seeking a guarantee of fitness. I do not put that as the full measure that should be applied, but it would certainly be a considerable improvement upon what we have, if it was sanctioned by the Government.

25841. What do you mean by "sanctioned by the Government" ? Do you mean the Government should say nobody shall wind unless he has this certificate from your Association ? Is that what you want ?—No, unless he has a certificate of that kind from the Home Office.

25842. I thought your Association, under the Durham Rules, did give certificates ?—Yes, we do, and we should like it if the Government would undertake to make it imperative that all men that have to be appointed at colliery engines should obtain a certificate after an examination, as we do in Durham in our little way, but rather more technical and in a larger way.

25843. Do you propose that the examination should do anything more than test the physical fitness of a man for the work ? The examination you require would merely test the physical fitness of a man. He must be of good moral character, steady habits, and possessed of ability ?—Yes.

25844. Do you propose to test by anything but a medical examination and certificate of character ?—Those claims are certainly imperative, but a man could not be a winder if his hearing was defective or his eye-sight was defective. We have had instances before us like this, that a man without medical examination has been accepted and a certificate granted, and after two months' practice it has been found that he was defective in hearing, and we have had to remit his fee and withdraw his certificate. Our only means is by a committee of enquiry. A medical examination would be necessary.

25845. Do you propose any examination except a medical examination ?—What we urge is that a man who is accepted to be examined should be a man who has had

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prior qualifications—who had as a preliminary been employed as a stoker or boiler-minder, or kindred employment.

25846. That is not a question of examination?—No.

25847. I was asking you as to the examination. You say there ought to be an examination to test physical fitness. I understand your suggestion as to a test of physical fitness, and that he should be of good character, but I am not certain whether you think it would be advisable to force him to go through any other kind of examination except for physical fitness and good character?—Why I have named that is that it is made imperative so far as our examination is concerned. We would not examine any man unless he had this preliminary training. What we desire the Government to do is to ascertain whether the man's knowledge of the construction of an engine technically, and his practical knowledge of winding, are such as they would regard him to be a fit man to be entrusted with the engine. That is all.

25848. Do you give any written examination before you certify that a man is a competent brakesman or hauling man?—No; the only thing is the manager at the colliery and the men under whom he has learned testify that by practice he is an efficient winder, a competent winder, and has wound for 12 months, and then we give a certificate. That is as far as we can go.

25849. You suggest the Government should go further, and institute a test as to whether a man knows the theory of winding and the theory of haulage?—Yes.

25850. That is your suggestion, at all events?—You will pardon me, but I do not know what may be meant by "theory."

25851. I will use your own words if you like: understanding the mechanism of the brakes, and so on—not only understanding what you are to do to haul a cage up and down, but understanding the whole mechanism of the engine, so that if anything goes wrong he should know how to set it right, or ask assistance in seeing it was set right?—You do not mean such a theory as would enable every man to work out the horse-power of an engine? We do not mean that.

25852. You go on to the question of keeps for making the cages steadfast. A good many accidents have happened owing to the cage getting into motion prematurely?—Yes.

25853. Whilst men are getting in or out the cage goes up or down, and accidents have happened, and you suggest keeps should be used?—I may say in my experience, and generally. We have not very much to complain of in this respect, but there are times. Take, for instance, at week-ends and during night-time, when we are not drawing the coals; often the heapstead is left without an attendant, and, as I have said here, except a man has a very reliable brake to his engine, keeping the cage suspended by gently applying steam while the load at the top is lessening, it may be the load at the bottom is increasing, because while men are getting out at the top others may be getting in at the bottom, and you can have a lessening load at the top and an increasing load at the bottom, thus making it a difficult matter to keep his stage stationary while that was being done. If keeps were there the cage could be kept at rest.

25854. You suggest that keeps should be made compulsory?—We do.

25855. What is the usual practice with regard to keeps? Are they used or not used?—They are used: that is the usual practice.

25856. Sometimes cages are let down without any keeps?—The keeps are always there. Usually the keeps are balanced, so that when the cage comes up each deck passes and they fall in, and you come back on to them. At night time, before the attendant leaves he brings the lever up and latches it up to keep the keeps out of the way. When the bulk of the men are changed, after the pit is done they will do this. When the full shift of men come to go down an attendant will come in with them, and from that time they commence to use them again for the next day, but incidentals, shift men, and repairing men, are often left without an attendant and without keeps.

25857. What is the object of putting these keeps back so that they do not act during the night?—It would be impossible to have them used without an attendant. If a workman comes on to the bank top to come down he calls to the winder to bring the cage up: he gets in and calls out the seam he wants to go to, or the bottom. He could not use the keeps himself: he must get in while they are out, or the cage could not go by.

25858. How do you propose to deal with that point?—I think that the Mines Act very largely deals with it; I do not say that I could drop on it exactly. The suggestion is that the attendant, the banksman, and the onsetter must be in attendance while men are getting in and out of cages. It is the intention of this that there should be men at the top and the bottom.

25859. You think the spirit of the Act is infringed by this practice of taking away the men who have to attend to the keeps during the night, and that ought not to be allowed?—Yes.

25860. Then you give instances of accidents that have happened. These accidents are still happening, I suppose?—I do not say that.

25861. In August last there was an accident?—Yes, but that was a temporary arrangement that they had. They had the keeps, but there was some special work being done. I have only cited that incident to illustrate what I mean. I do not suggest that the practice of changing men without keeps is very extensively in vogue in our county.

25862. You think this practice of not having men to look after the keeps during the night and, consequently the keeps having to be put back so as not to act, is a dangerous practice and ought not to be allowed. You cannot lay your hand on any recent accident that has been caused by that practice?—Yes, I have a case here of Hummerbeck. A miner fell down the pit at Hummerbeck on April 7th, 1906. After deliberating in private, the jury returned a verdict of accidental death. They recommended that the brakesman should not leave his engine, and that when the men were riding keeps should be used. They expressed the opinion that William Meynell was not a capable brakesman.

25863. (*Mr. F. L. Davis.*) That was the man in charge of the engine?—Yes. I cited that in my Statement. If keeps had been used in the instance I quoted, this man would have been saved, because the cage went away prematurely. It would have gone on to the keeps and the man would have been all right.

25864. (*Chairman.*) This was where keeps were not used at all. You say not only must keeps be used in all cases, but they must be used at all times. Not only must they always be there, but always have somebody to attend to them and see that they can be used?—Yes, because the Mines Act somewhere does say, that the men at the top and the bottom shall be in a position to signal to the engineman in the event of anything taking place while the cages are running in the shaft. If there is no one there, that part of the Act cannot be carried out, because the cages would be running the journey and something might take place on that journey the same as any other journey.

25865. Although it is no breach of the rules to put up the keeps, it is a breach that nobody should be there to look after them?—Quite so.

25866. Or a practical breach of the rules; at all events a breach of the spirit of the Act. Perhaps it is some Special Rule you are referring to?—This is a procedure difficult to me, differentiating between the Act, General Rules, and Special Rules.

25867. At all events there is some rule in operation to the effect you have stated?—Here is the Special Rule in the Special Rules for Durham County, what they call the West District. It says: "Each banksman shall have control of the shaft top and each onsetter of the shaft bottom, and shall not allow any person to descend or ascend the pit without permission from the proper authority; he shall regulate, subject to any directions of the manager or under-manager, the order in which persons shall enter and leave the cage, and see that the authorised number only descend or ascend at one time, and shall not allow any person to descend in a state of intoxication, nor allow any intoxicating drink to be taken down the pit, except by special permission."

25868. Under that rule it would be necessary during the whole 24 hours, or when it was possible for any man to have to go down, that there should be somebody on top and somebody at the bottom?—Here is Rule 86 in this Code, which says: "When persons are to descend or ascend, the agreed signal shall be given by the banksman or onsetter only, except where otherwise authorised; and when persons are descending or ascending, the banksman and onsetter shall remain in a position so as immediately to signal the engineman in case of an accident."

25869. As regards keeps, you would be satisfied if that Special Rule was carried into effect and if keeps were made compulsory?—Yes.

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25870. That Special Rule, you think, might be made a General Rule ?—That is what we think and desire.

25871. For the whole of the United Kingdom ?—Yes.

25872. As regards hours, you say you ought to have eight hours a day for winding, and you refer to the evidence which Sir Lindsay Wood gave in 1897. What do you mean by " told us " ?—That was something Sir Lindsay Wood said at the Mining Institute in the North respecting the journeys.

25873. He was making an address to the Mining Institute and said that in the course of his address in 1897 ?—Yes. In Durham we have an arrangement for an eight hours' shift—an eight-hours' day throughout the county for winding. A provision of this kind made by the Government would not affect us much as a county, but as a representative of the National Federation, I am urging this with a view to bringing about an arrangement of eight hours throughout the whole mining districts.

25874. In Durham you have eight hours ?—Yes.

25875. You do not complain as regards the length of hours. You have no complaint to make as regards the practice in Durham. You want that practice made universal by Act of Parliament ?—Yes. We have instances, although they are few, in which men in Durham have stood excessive hours because the management would not otherwise provide for the man stopping 16 hours, two shifts, if his partner was ill. He would not be prohibited from staying 16 hours, and I have one or two instances in my mind where accidents have occurred while men were doing one of these longer terms than eight hours.

25876. That would be difficult to provide against. It would be a reasonable thing if a man was ill that his mate should take his place for the next shift. That would be a good arrangement. How would you manage that ? —We think that there ought to be a provision of that kind.

25877. In case of illness ?—In our arrangement with the masters in Durham we have pledged ourselves thus, that in the event of a man being ill, that two men shall make up the deficiency by following in eight hours at work and eight hours at home, but that is not strictly adhered to. Sometimes two men, rather than do that, stand 12 hours each, because the other method brings them oftener from home to work and consumes part of the time in coming and going.

25878. You think in Durham things are not what they ought to be in regard to hours, and you ought to come to some arrangement whereby under no circumstances should any man be allowed to work for more than eight hours as a winder ?—Yes.

25879. You think that should be enforced in all cases of illness where possible, because a case might arise where the next man could not do his shift through being suddenly ill. The man who had completed his eight-hours' shift would have to go on until somebody could be brought. In a case of necessity you would allow that ?—That is one of the things that we urge upon our people : no matter what the intervention was, as the winding-man holds the gate, so to speak, of the highways of the mine, he must not go and leave it, because he stops all means of getting in and out.

25880. You say in conclusion : " We ask the Commission to do something to prohibit single individuals being sent into the mines alone to attend pumping engines and electric motors, &c., during week-ends and at nighttime when the pits are to be idle the next day " ?—Would you pardon me if I refer to paragraph 5 respecting signalling men at the bottom.

25881. Certainly ?—That is a thing we, as winding men, feel very much about. It is at week-ends and during night turns. This is what took place at the bottom. What I complained of at the top before was largely affecting the top. This is the bottom and we are subject to men coming and giving us a signal that they want to ride, whereas the Special Rules provide that they must be seen into the cage by the attendant and signalled away : but in practice in many places at week-ends and night turns—I do not mean when pits are doing their full work—a man comes to the shaft bottom and signals himself away. After he signals, the enginemen have to think, " Will he be in now ? " They have to give him time. When I was an apprentice my old tutor said, " I will tell you what to do—count 12," and that was the time in which any man could get into the cage. Of course I did not always count 12, but one got so that we could measure the time somehow or other. It is not a safe practice. In Northumberland Bebside case I have referred to, the man was not killed right out, but he told his brother-in-law that the engineman was too sharp for him and caught him. I remember another case, where, as the man was stooping getting in, the slot that comes down to keep the tubs in position, got in behind the collar of his jacket and he was held until the winding-man took the cage away, and he was killed. We do not like such risks. It is a thing that produces in us very much anxiety. Supposing we give a person over time. If we waited too long I have known instances where the man has thought, " I have not given the right signal, I had better get out again." It is a very dangerous thing. You must just give them the right time to get in nicely and get away. If you hold the man, the chances are he thinks, " I have not signalled right and I will get out." We do think that the Government should prohibit that.

25882. (*Mr. Ratcliffe Ellis.*) Do you want the signal to be in the engine-house ?—No ; we want an attendant at the bottom to see that this man gets in, and signal the man away.

25883. (*Chairman.*) That would be necessary if it was obligatory to have the keeps in position, so that they could act. You must have somebody down below. That would be necessary if it was obligatory to have the keeps in acting order ?—That is so, excepting there are more decks than one. You generally go on to the bottom, and that does not need keeps except there are more decks, in which case you lift the cage and put them back on to the keeps.

25884. There ought always to be somebody at the bottom to see the men safely in ?—Yes.

25885. The keeps should be put in position and should not be released until the man had got in ?—That is so.

25886. Do you wish to say anything more on that point ?—No.

25886A. Then we will go on. You do not want single individuals sent into mines alone ?—No. I do not think that obtains to any very great extent, although it does obtain. At the present moment, for instance, I have a letter—I am not going to read the letter—where the Secretary says, " What I mean is they want one man to look after both pumps at the week-ends, and they will be the whole time of the shift alone in the pit." That, we think, ought not to be. At this particular job that I instance there are two men, two engines 500 yards apart, and through the week there is one man at each engine, but at week-ends one man is sent down alone to attend to those engines, and we think that no man ought to be alone in a mine.

25887. (*Mr. Ratcliffe Ellis.*) With reference to your last answer, it may be quite right, but why do you think that a man should not be alone in a mine ?—A very little accident might disable him from getting out-bye to the shaft. He might be scalded by his engine ; a small accident might keep him fastened where he was, until somebody got concerned about his not getting home, and they would go and, perhaps, find the man unconscious, or in some way incapacitated, or injured, and we think he should have some company.

25888. That would mean that there must be another man there doing nothing, but being there in case anything happened to the other man ?—I do not know that it would mean a man. A boy would always be an efficient messenger.

25889. There may be two or three men in the pit, but not sufficiently near to render assistance in case such a thing as you suggest happened. Your idea is that wherever one is employed there must be a man or a boy with him to take a message if he is hurt ?—We do not ask for this where there are other men in the pit. They may be in other districts. We say there ought always to be more than one man in the mine.

25890. Would not the reason you have given apply also if there are six men in the pit in different districts entirely away from each other ? They would not go and look and see if an accident had happened to a man. He would have no means of communicating with them ?— That would obtain there as well.

25891. If your suggestion is carried out, it must mean with each man down a mine during the night—this is between shifts—there must be a man or a boy for the sole purpose of taking a message if anything happens ?—It is a serious matter for a man if employed in an out of the way district and he is scalded or injured, and he is helpless until accidentally somebody finds him out.

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25892. I want to know whether or not you seriously suggest in all cases of that kind there must be somebody for the sole purpose of taking a message in case he should be hurt?—We think, for the man's safety, that there should be a provision of that kind.

25893. You thought a man before, but you think a boy might be sufficient?—Did I say a man?

25894. I may be mistaken, but I understood you to say a man?—"We ask the Commission to do something to prohibit single individuals being sent into the mines alone to attend pumping engines and electric motors." That is what we desire.

25895. I should be glad of some assistance as to how the Commission is to do that. Somebody must go down. It is not preventing the man going down?—No.

25896. Your only remedy is for the purpose of taking a message that this man is hurt, that there should be a second person with him?—It would not be an extraordinary claim upon the employers.

25897. I want to know what you suggest. It may not be a large claim. That is what you suggest?—We suggest that where a man is employed tending an engine or an electric motor, that there should be someone that can run away in the event of an accident or injury, or whatever it may be, and communicate it to somebody.

25898. Is not that really what it comes to? You suggest that there should be some person there with no work to do except to wait on the chance of this man meeting with an accident, to communicate it to somebody?—Well, yes.

25899. Do you find the number of accidents to these single men very large?—As I said before, this does not obtain to any large extent. I do not know, probably, that I could get more than a dozen cases in Durham. I do not know that I could, but so long as it is possible we think that something should be done to prohibit it.

25900. (*Mr. Ratcliffe Ellis.*) I do not quite understand what these keeps are. When a cage gets to the top of the pit there is a lever drawn, and these are drawn out from underneath and hold the cage steady?—Yes.

25901. What is it you want beyond that?—Nothing.

25902. You want these keeps to be always put into action when the cage is at rest, that it should hang loose in the shaft?—In ordinary coal drawing in ordinary working with men, as the cage comes past, the keeps are weighted to position and the cage puts them by until the decks pass, the cage then comes back on to the keeps. There is a portion of the 24 hours in which there is not, probably, much done, and they do not have an attendant, and they fasten the keeps back and the cages go up with men, and there is nothing to steady while the men are getting in and out.

25903. They do not have an attendant. There is a banksman, surely?—In some places there is no banksman.

25904. Nobody on the pit, and the men get in themselves?—Yes.

25905. You want, when men are wound up and down, that there should be an attendant to see that these keeps are working, and that the cage hangs on the keeps and does not hang loose in the shaft?—That is so.

25906. The banksman is required to be there by the Act, or your rules. All you really want is your rules carried out. "Each banksman shall have control of the shaft top, and each onsetter of the shaft bottom, and shall not allow any person to descend or ascend the pit without permission from the proper authority"?—That is it, the proper authority.

25907. He has to be there. I should have thought it meant the banksman must be there on the top and the onsetter at the bottom, to see that they come in properly?—We believe the practice in some places is a contravention of what is intended by the Act.

25908. It ought to be put as a General Rule, as his Lordship has said. With regard to the hours for the general winders, you have in Durham eight hours?—Yes.

25909. In some places they have a good deal longer?—Yes, I believe they have.

25910. In Lancashire they have longer than that?—Yes.

25911. One of your rules for the engineman is that he shall have "responsible charge of the engines, boilers, and the whole of the machinery with its appendages in and about the mine, and all erections on the surface." I see that is not the engineman; that is the engineer. Has he to do anything except winding? Has he to clean his engine?—Yes, very often, and grathing.

25912. When does he do that?—Generally at week-ends. Cleaning and grathing is done at week-ends after we have drawn the week's output of coals and the week's work is over.

25913. During the eight hours is he winding all that time?—Yes, winding all that time, either men or coals. We say he winds 10 hours, coals and men, and men with casual work for 14 hours.

25914. How is this eight hours you speak of? There are 10 hours occupied in winding coals and men?—Yes.

25915. Do you change the winding engineer?—Yes, because after this is done, the shafts, according to this regulation, are to be examined. Men come in and they examine the shafts, doing repairs, etc. Then large timber that cannot be sent in the cages is sent down on the cage tops. Ordinarily we have the inspectors and three shaft men. Then timber goes down; then there is a shift of what we call the shift men, who may come in, and other men to keep the pit in order. We have frequently men changing during the night. It is continuous. The men are there continuously from six in the morning till six the next morning doing something.

25916. You have three enginemen, and they take eight hours shift each?—Yes.

25917. They change the shift: it does not matter what is going on, whether coal, men, or timber is going down, the men change at a certain hour?—Yes.

25918. If the relief man does not come, does he go on?—Yes, he continues. We know that.

25919. You recognise that?—We recognise that he could not go and leave the engine.

25920. You think that arrangement is satisfactory. What if the second man did not happen to come?—In that circumstance the man would communicate with the manager or the engineer, as the case may be, intimating that "My partner has not come in; kindly have me relieved after four hours from now." If I was at the engine and my partner did not come in I would intimate to the engineer, "I am willing to stop four hours; kindly arrange for my being relieved at the end of four hours," and thus we would make up the middleman's time by that arrangement.

25921. You do not bring in a relief man other than those regularly engaged at winding that engine?—There are some places where they have relief men, but it is not customary.

25922. It is not usual in Durham?—No.

25923. You must make arrangements with the men who usually wind, but you cannot bring an outsider to take charge of the engine?—No.

25924. Do you think that would be preferable to having a man working 16 hours—two shifts?—Calling a relief man?

25925. Yes.—Yes, it would be. As I said before, we have an arrangement if one of the three men does not come in, then the other two must fill the time in.

25926. They divide it?—Yes.

25927. (*Mr. Wm. Abraham.*) That is in cases of emergency?—Yes.

25928. (*Mr. Ratcliffe Ellis.*) With regard to the qualifying certificate, you are an engine-winder, I believe?—Yes.

25929. You did not have a certificate?—No.

25930. Are you any the worse for it?—I should think I am worse. If I had been able to get a certificate from the Government at that time I think I would have had a better start than I got.

25931. The qualifications of an engine-winder, some of them at any rate, you can hardly ascertain by an examination by the Home Office—nerve steadiness?—That is so.

25932. You would have to find out in some other way?—Yes.

25933. Experience?—Yes.

25934. A Home Office examination would be merely as to the knowledge of the engine?—Yes.

25935. How would you ascertain that he was satisfactory as to what I should say are the more important qualifications, the natural physical qualifications?—We think it could be ascertained in two grades; for instance, a man would satisfy the Home Office that he was a fit and proper person to be taught to undertake to learn the duties, and then, after he had demonstrated his fitness by

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practical work to the manager and to the men, a report of this kind would be submitted, and further examination by the Department before he got his certificate of competency.

25936. Do you propose, before a man begins to learn his business, that he must have a certificate from the Home Office that he is a fit and proper person to be taught ?—Yes.

25937. A preliminary examination ?—Yes ; that is what we think.

25938. That is not part of your Bill ?—Yes, I think so.

25939. Your Bill was that persons should have a certificate, but after he was supposed to be competent, a certificate to say that he was competent, not a preliminary certificate before he began to serve his apprenticeship ?—I think the Bill seemed to regard winding as being a point to be reached by a first-class certificate. A man who had not a first-class certificate could only take jobs of less importance than winding, and that in the first grade a man would come to such proficiency that he could take charge for instance, of the fan and the pumping engine, and the haulage.

25940. I think if we look at the Bill it provided that no person should be entitled to work a winding engine who had not got a first-class certificate. That was the principle of the Bill ?—Yes.

25941. It would be an offence, punishable ?—Yes.

25942. Therefore the effect of that would be, whatever happened, as you say, the winding man holds the gate, and the gate would be held by a certificated winding-man, and no other person could obtain access to the mines or bring anybody out of them ?—No.

25943. In order to obtain a certificate you agree that the apprentice must be taught his business ?—Yes.

25944. The facilities which are afforded for teaching him his business would very largely depend upon whether he got a certificate or not. If the facilities were easy, if a man could learn his business without any difficulty, there would be more certificated men than if a man was restricted in learning his business. Supposing your Association claimed the right to say, "We shall not teach anybody except the persons we decide upon," your Association would hold the gate ?—Yes.

25945. You did not quite answer his Lordship's question as to whether you claimed that you should have the right. You said you could not call to mind an instance when you had refused a nominee of the manager, but do you claim the right to refuse a person nominated by the manager ?—An unfit person.

25946. Fit or unfit, do you claim the right to say that you and you alone shall say who shall be taught ?—That is governed by this: The 24th Rule makes the proper discharge of the work incumbent upon the person in charge of the winding engine. Our position is this : if the management force the man who has charge of the winding engine to teach another, and the teaching of that other embarrasses the man, hinders the man from efficiently managing his work, then that is an undue interference with the winder, and if he happened to bear the consequences of that interference and liability, we claim on these grounds that we shall have an assurance that the least possible embarrassment shall take place in the event of teaching another.

25947. I should like to go further than that, and know whether your Association claims the right to refuse to teach a person of whom it does not approve ?—Well, yes, we seek to claim that right.

25948. I want to read you a few rules ; no doubt you are acquainted with them. First of all, take your own rule : "Any person wishing to become a member of this Association, to be taught the art of winding, must obtain the consent of some competent financial member or members, who will undertake to teach him, and be proposed and seconded by two financial members at least one month previous to his admission." You mean that in its fullest sense your Assoication are to control the persons who are to be taught to wind ; therefore your Association would control the persons who would have certificates ?—Yes.

25949. And your Association therefore would control the gates ?—No, I beg your pardon. What we are asking the Government to do is to remove these restrictions from the authority of our Association and to enforce them themselves, and then that would cease to be so. Through what we have done we have a more efficient staff of men than we would have if these regulations were not in force, and we do not want them to rest there : we want the Government to determine on some other code than our rules and enforce them.

25950. Supposing the Government said : "We will nominate persons entirely outside the Enginewinders' Association to be taught," your rules would not allow you to do that ?—We would have to make our rules to fit.

25951. I think you are the General Secretary of the Association ?—Yes.

25952. In the St. Helens Association of Colliery Enginemen, Rule 10 says : "A member who teaches anyone the business of an engineman, unless he is his son or brother, or the son of another member of the Association, will be fined not more than forty shillings." In the Cumberland Enginemen's Friendly and Protective Association, Rule 9 says : "No member may allow a non-member (except his partner) to interfere with his engine, nor may he instruct a non-member with regard to the working of his engine." The Wigan, Bolton and District Colliery Enginemen's Mutual Protection Association says in its rules : "No member of this Association shall be allowed to instruct any person in the business of engine-winding so long as there are competent persons of respectable characters who are out of employment, and who are members of this Association ; but if there are no members out of employment, then the Committee shall have power to confer with the management of collieries with a view to the next best person to be learned or instructed. It shall be optional for a member to instruct his son, if he deem it necessary, for the purpose of making him a competent winder only, but a member's son shall not have the preference of a vacant situation before a member of this Association. If it be proved on the testimony of two witnesses that this rule has been violated by any member (after the issue of these rules), such defaulting member will be expelled from this Association." Then the rules of the Enginemen, Boilermen and Firemen's Amalgamated Association of Great Britain and Ireland say : "If any engineman, boilerman or fireman be asked to teach a man the business of an engineman, boilerman or fireman, he must first acquaint the president or secretary of the lodge he belongs to before he takes any further steps, and they will instruct him how to proceed. If any member, after having received such instructions, be taken advantage of, he shall receive his current rate of wages for three months, after which time his case shall be reconsidered by the Association, *i.e.*, he shall receive out-of-work pay from his own lodge, and the remainder from the Association." These are specimens of the rules. I put it to you if there is to be this limitation upon the persons who are to be taught to wind, and a person is not to get a certificate of proficiency unless he is taught, and the men cannot be now, except by a person who has a certificate of competency, it would place your Association in charge of the gate, as you very properly term it, of the mine, and prevent the owner getting into his own mine except by your sanction ?—I admit it.

25953. Do you remember in the year 1895 a difficulty arose at the Wigan Coal and Iron Company's collieries ? I rather think you came down at the time ?—I did.

25954. Did you say at that time that the Association were to have the option of saying who should be taught ? —Yes.

25955. That is what you say to-day ?—Yes, as the regulation of things is to-day we still say so.

25956. (*Mr. Smillie.*) If the Government took up your position and had an examination, that would change it. You have been doing what you want the Government to do ?—In some districts in a very objectionable way. They have to give evidence of some fitness and some preliminary qualifications and submit to certain regulations which may seem to be out of propriety. We desire the Government to lay down a general line outside of the societies, and that would do away with the preference of enginemen's sons and brothers.

25957. (*Mr. Ratcliffe Ellis.*) I quite agree with you to do anything possible to secure competency of an engine-winder, which is a very responsible position. If the Government adopted a principle of examination, would you be prepared to say that these restrictions would not be pressed as to the persons who should be taught ? If you do not feel justified in saying that, I will not press it ?—Will you repeat the question.

25958. Supposing the Government decided to have an examination for engine-men as to their competency, would you be prepared to say that the rule of your Association, which requires that you shall have the option of saying who shall be taught, might be altered so as to enable persons to be taught who were approved by the examination of the Home Office ?—My private opinion is that if such a regulation was drafted by the Government, it would be imperative on our part to change our regulations. I do

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not know whether there are not certain matters in them that our people might not seek to retain, but the general aspect and reading would be done away with.

25959. (*Mr. Wm. Abraham.*) As I understand your position, you are here to advocate that competent men only should be allowed to work these engines ?—Yes.

25960. That is your object, and not that they should be members of your association ?—No.

25961. Your first object is that this should be so in order to save lives and limbs ?—That is so.

25962. If the Home Office undertook to make i compulsory that none but competent men should be employed in winding engines at collieries, you would trust your society or other members, as other unions do, without having these rules as they are now ?—Yes. I would not like to be misunderstood, and there is one thing I should like to mention. As it has been observed here, a man might satisfy a committee of inquiry of the Home Office as to his fitness in many respects, but it has often been seen that after a trial his nerve was not such as made him a fit winding man. We might know a man from our practical knowledge, from every-day touch with him, that he was a man that could not be a winding man. What I want to point out is this: it is a fact in the practice of teaching men to wind, where there are three men, one of the men has been sometimes really incapable of teaching. He could not admit of any embarrassment at all or any interruption outside, anything that took his mind from his work. We have men who cannot do anything in the way of teaching. It is as much as they can do to manage their work. We think neither the Government nor our society should force such a man, who can do his work without embarrassment, to be interfered with. We think so far as protecting him from embarrassment is concerned that might even come from a Home Office Committee. We would try to construct something to protect a man in such circumstances.

25963. Two examinations have been spoken of. Mr. Ellis was good enough to say one is as important as the other. What is the first examination you lay down as a rule. Is it a physical one or the ability of a man at his engine ?—The first is that this 24th Rule provides that he shall be 22 years of age. We say that the man is 22. So far as we are able, we do not ask any doctor's certificate or examination, but we are assured that the man's hearing is good and his eyesight is good. We are assured that he has a good moral character, and that he is a steady man. That is one point we make. What he has been employed at previously, and if a man can give evidence that he has been employed as a stoker, or attended boilers, or been otherwise employed at engines for a period of three years, we accept that as a satisfactory condition, and if we are satisfied on those other matters we give a certificate or permit, such as you have, and he commences then to learn. The second stage is from report. If the men under whom he has learnt and the manager are agreed that he is a competent man, they make a report to us and we sign another certificate.

25964. You think as a practical man that it is necessary that a man should have a certificate to prove that he has passed a satisfactory examination, and in that examination proved himself to be a competent engineman before he is employed ?—Yes, we do.

25965. What would you examine him on, to start with. Take the two stages: the preliminary one, the man's acquaintance with boilers, and so forth, before he becomes a winder. What do you consider the qualifications to be ?—In the first place we should claim that the man should have a correct knowledge of the keeping of the boilers under safe and proper conditions, and that he should know the construction of his engine and not only as to the movement of the handles to produce a certain motion, but as to what really takes effect in the piston, what produces the movement. I do not mean of a close theoretical kind, but such a one that the man knows in himself what is taking place and what power he has caused to operate.

25966. In your opinion is that not necessary in order to find out the intention of the rule already in existence. Rule 80 here says: "The engineman, or some competent person appointed by the engineer, with the consent of the manager, shall once a day thoroughly examine his engine, rope rolls and flanges or horns, the ropes upon the rolls or drums, the brake, and the signal bell or indicator showing the position of the cage in the shaft, and shall immediately report any defect he may observe to the engineer, foreman enginewright, or other authorised person for the time being appointed by the manager." Before a man is able to do that he ought to be able, in your opinion, to prove by examination that he is competent ?—I think that is so. I think the man ought to know sufficient to enable him to determine whether those things are right or wrong that he has been examining. His competency is left with the opinion of the engineer.

25967. I will come to that now. You want another authority not interested simply in the mine and seeing that the man produces so much coal, some independent authority, independent of the employer, the owner and the workmen ?—That is it.

25968. Some authority to ascertain that this man, before he is employed in that important position, is a competent person ?—That is so, to discharge the duties that are incumbent on him by this rule.

25969. Take an engineer employed in a ship: he has to have a certificate ?—He has.

25970. As a rule he has as many persons under his care as you as winding enginemen have ?—Yes.

25971. Winding enginemen have as many men's lives in their charge as any engineer employed anywhere ?—I should think so. That is proved by what I refer to in my statement: "Sir Lindsay Wood told us in 1897 that there were 550,000 persons employed underground in the mines, and he estimated that the cages would make 200,000,000 journeys per year"—that is made by the winders.

25972. All you want and all you consider essentially necessary is that these men should be thoroughly competent, approved by an independent authority not connected with the mine at all ?—That is just what we want.

25973. You know of several cases where lives have been lost because men were not kept at the keeps, when men were allowed to descend and ascend the shaft ?—Yes.

25974. Do you think that should be put a stop to ?—Here is a case that took place on August 11th, 1906, at Boldon Colliery in Durham: the Jury returned this verdict: "We find the three men were accidently killed through the overwinding of the cage by mistake of the engineman. We entirely exonerate the engineman from blame owing to the fact that he was working an engine entirely different from the type he had been accustomed to work. We are of opinion that the provisions of the Mines Act had been carried out there, but think that the lives of at least two of the men might have been saved if detaching hooks and keeps had been used."

25975. You have given in evidence instances of several lives being lost because men were allowed to ascend and descend with nobody at the keep ?—Yes.

25976. In your opinion that ought not to be allowed ?—We think that.

25977. In your opinion, as a practical engineer, in the ordinary state of things men should not be allowed to be at the handles more than eight hours a day ?—Yes.

25978. But in order not to prevent the working of the colliery, you are making provision to keep the handles going ?—Yes. I may say in relation to the hours, I have already said that in Durham we have an arrangement for eight hours per day for men and this is what obtains. We really divide the 24 hours into seven, eight, and nine hours. The practice has commended itself to the men. In the busiest shift we have seven hours; that is during the part that is all coal drawing and men changing, that is from six to one. The next shift we have only half full time and half incidentals, and that is eight hours, and then the nine-hour shift, that is changing men and waiting on men and casuals, nine hours. So that even with eight hours we have deemed it necessary to institute in Durham universally seven hours for the busiest part of the day, and it is a custom that commends itself to the employers as well as to ourselves. We cannot exert for a longer period that control and attention and manipulation of the engine over 12 hours.

25979. In your opinion a short shift for a winder is essential in the interests of the safety of the mine ?—We believe so.

25980. With regard to the question of a man being alone, supposing there was one man in three or four districts, it would be possible to keep a boy to pay a visit to various places now and then and see that nothing was wrong ?—Yes.

25981. So that you need not keep a boy even at each place ?—No.

25982. Where the safety of life is at stake the employment of a boy probably should not be considered too much to provide ?—No.

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25983. (*Mr. F. L. Davis.*) Do you think that a boy walking about in three or four different districts to see that the men employed there are all right is a sensible or reasonable thing?—We quite see that something might happen to the boy on his journey and nobody know.

25984. Would you not want a bigger boy to look after that boy?—Outside of that, I think really one man in an out-of-the-way part of a mine attending on the engine is something we should provide against.

25985. How often does that occur, that there is only one man in the mine?—When the mines are free from the ordinary working, such as week-ends. In this instance I have cited here, the facts are during the week two men were employed at the engines, one man at each, and at the week-end the management are asking that one man go down and attend the two.

25986. I understand that one man would be asked to look after two engines to see that they are all right. Does it occur often that there is nobody else in the mine except that man. It seems to me that it cannot occur very often. Are there not repairers doing some work besides this one man looking after the engines?—I do not know that I could give you any instance but this instance which is just at hand. Inasmuch as there is this case, we say there is the possibility of others coming, and we ask you to provide against the possibility of this happening.

25987. Do you not think it is a very rare thing for there to be only one man in the pit at any time?—Yes, I think it is a very rare thing.

25988. Do you make any complaint that the winding enginemen in your county are not competent men?—No.

25989. There are a number of incompetent men?—No, as a Trades Union, I think it has been seen here there is considerable objection in conforming exactly to our regulations. I said it was generally mutually accepted, but beyond that mutuality there are here and there objections, and there is friction between us and the employers, and we would desire that these precautions should be shifted from the authority of the Enginemen's Union to some other authority.

25990. (*Chairman.*) Do you mean to say, as a matter of fact, that there are men employed as enginemen in the county of Durham that have not a certificate from their trade union?—Yes, Hummerbeck Colliery, and the jury expressed the opinion that William Meynell was not capable of being an engineman. There are a few instances, but very few.

25991. (*Mr. F. L. Davis.*) There are some men who are winding enginemen, but who are not in your association?—I do not know that there are many.

25992. Do you claim that all the winding enginemen in Durham belong to your association?—I think we find there are 97 per cent. of the winders in Durham who are members of our union.

25993. What is the friction you referred to just now?—It may be that a manager of a mine may have fixed his mind on some man to be taught to wind that is not generally accepted by our people. He may not be a stoker, he may not be a boiler-minder, he may be some other man who has never been connected with steam practice, and we resent that, but a manager may think him a bright, intelligent man for all that and have him taught, but we resent it.

25994. You claim really that you want to have the nomination in your own hands of those who should learn to be winding men?—Yes, we do claim jointly, because the first condition that we lay down——

25995. Not jointly; your association claims to nominate all the men who wish to become winding enginemen. That is so, is it not?—It says here, in the first section of Rule 2, "he must have served at least three years in the capacity of some kindred employment, as firing, boiler-minding, or attending engines, and be of good moral character, steady habits, and possessed of good ability. Having first obtained the consent of the manager of the colliery."

(*Mr. Ratcliffe Ellis.*) He may have all that, but you have the right to say "No."

(*Mr. F. L. Davis.*) That is what I wish to put to you. You object to the management suggesting a man should be taught.

25996. (*Chairman.*) You consider it reasonable to say that a man shall not be taught engine-winding unless he has had experience before in the management of boilers or some kindred occupation?—Yes, we claim that.

25997. Why do you claim that? Why should not an intelligent youth be taught engine-winding?—Because we think a man trained by a kindred employment would be a man to give the least embarrassment to his teacher in charge of the whole machinery and the lives of the men, because a man cannot be proficient until he is trusted to draw men. Take that single instance. There comes a time when the teacher thinks, "I dare trust him with this cage of men," and he has to venture a trust; the management has not. Mr. Cooper, the lawyer for the North Owners' Association, told us it was a thing that the law had placed upon the men in charge, and neither the management nor anyone else could relieve the man from the liability, and there comes a time when he has to think, "I will trust him with a cage of men this time." If anything takes place the man that trusted him, and not the apprentice, is the man liable.

25998. Supposing an intelligent youth applies to be taught engine-winding. Three years before he can be taught he has to go into employment in a mine that has to do with boilers for three years. How can an intelligent youth of 16 years of age, if he wants to be an engine-winder, and his father is not an engine-winder, and he has not any connection with your association at all, but at the same time is intelligent and wants to become a member of your association in course of time, how can he begin? What steps must he take?—Supposing we were to undertake to teach such a one, and he is taught, and can efficiently manage the engine, then there are other duties enforced upon him as specified. Mr. Abraham, I think, read them; that he is to have charge of the boilers and the feed, and he is to examine the ropes and fittings.

25999. I want to know whether there is any restriction placed upon a boy seeking to learn all these things. I understand he must not only learn the winding, but also have three years' experience in the management of the boilers and things of that sort. If a youth of 16 says, "I want to know all about boilers and to be an engine-winder," is it possible for an intelligent youth to be certain at all events of taking his chance of that employment, or can your Association step in any say, "We have enough engine-winders being taught the trade and we will not have any more"?—The Mines Act prohibits young men working the engine. It says a person not less than 22.

26000. I want to know whether you seek to place any restriction upon an intelligent youth becoming an engine-winder in course of time after he has gone through the preliminary course you suggest he ought to go through. If he is willing to go in for a three years' course with a boiler and do everything to become a competent engineman, do you propose to place any obstacle in the way of his going in for that line of business?—No. As I said before, I do not know of a single instance the proposition has been made to us—I mean the Executive Committee managing those things in the county—where we have refused.

(*Mr. Ratcliffe Ellis.*) Your rules want a good deal of altering.

26001. (*Chairman.*) You would not in the least object to it being placed absolutely within the jurisdiction of the Home Office to have complete control over this question of teaching engine-winders?—No.

26002. That is to say, your Association would be perfectly content to leave it to the Home Office without any power on your part to refuse an application, to say that so-and-so must be taught in such a way that he shall be a competent engine-winder when he has finished his course?—That is what we are seeking.

26003. (*Mr. F. L. Davis.*) How do you teach one of these men? Will you tell me shortly? When he has got to the stage that he gets into the engine-house, how do you teach him?—After the coal-drawing is ended and we have lifted the men and there is a lull, the cages may be put by in the shaft. If we are waiting we would ask him to come to the handles, and we would stand by and direct him what to do, and the movements he made would be made between the alarm bell. There is a space, it may be three parts of the pit, between the alarms. We would keep him there and get him to run the engine, reverse it, until he felt what was needed. Then after we felt that the young man had a good idea and knew what to do and could stop the engine, we would give him fictitious marks and say, "Come to that mark and stop." We would practice by coming to a certain mark we had made ourselves. After we saw he had a good gauge and could manage the engine, we would venture him to come to bank, and thus we would lead him on by a process of that kind.

26004. How long would that take in the case of an average intelligent man?—I should think three months.

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26005. While you are winding does he spend that time in the engine house watching you and watching the engine ?—If he is a fireman attending the boilers near at hand, it may be that he, if he has permission from the management to do it, may arrange his work so that he may come up during his own time and get those instructions, that is if his work will permit it. At other times, after going home and changing, he comes back to the engine-room. I do not know that there is any line that I could lay down as being uniform in this matter.

26006. (*Mr. Ratcliffe Ellis.*) Will you listen to this as a method of teaching ; " A boy comes to us when leaving school at 13 years or thereabouts and is put in the engine-house in the first instance to clean and oil the engines. He is there until 15 years of age, then he is put into the fire-hole under the stoker. He helps him in cleaning the boiler fronts and in looking after the donkey engine to feed the boilers. He is also employed to assist in cleaning the inside of the boilers. At 16 he is made assistant stoker with a little more responsibility upon him, he practically doing the same work as before, but without quite the same supervision. At 18, if he is found to be thoroughly fit, from previous practical knowledge of him, to take charge of boilers under the supervision of the engineman and machinery inspector, he takes a position of boiler minder : but, as a rule, he is much older than this before a place is open to him to take such a situation. Then if it is found that he is attentive and steady, with hearing and eyesight good, and physically strong, at the age of 18 to 21, if he is eligible, to be put to hauling and pumping engines. At 22, if he still bears a good character and has been apt in the performance of his previous duties, he is taught to wind at a winding-engine where water is wound (not men). He becomes thus qualified to take the place of a winder should a vacancy occur, but when such occurs, an experienced man is put with him in the first instance to get him into the way of the peculiarities of the engine. By the Act he cannot wind at all until over 22 years of age. It very rarely happens that a man so young as that is put to wind at even the least important of our pits. The youngest winder is about 28 years of age." Do you approve of that training ?—No. I could approve of it, but I would not suggest it as being a desirable routine of training. For instance, a young man may be partly apprenticed to some other trade or working anywhere : but there comes in his mind at the age of about 17 or 18 that he would like to be a winder. If he can become a stoker or boiler-minder for three years we would admit him on that, but this would suggest that a boy must choose to be a winder at the start, at 13.

26007. No, he is put to this work to begin with, and as he gets along, if he shows the aptitude, he blossoms into a winder. This is the method that is adopted at the Wigan Coal and Iron Company's works, where you went down in 1895, and said you must have the selection of those who are to be employed ?—Yes : we have not engines set apart for water drawing.

26008. That is what the management will do. They will teach him on a winding-engine for water where he cannot do any mischief. After you had been to Wigan, I believe they told you that they should retain in their hands the selection of the persons to be taught ?—The management ?

26009. Yes ?—Yes.

26010. Do you refer to that in your subsequent Conference, and does this appear in the Twenty-third Annual Conference of the National Federation of Enginemen Protective Associations of Great Britain, the President said ; " The Bill introduced by the Home Secretary on behalf of the Government omitted the whole of these provisions, and the Conference ought to deal with that." After some remarks on the certificates of Enginemen and Boilermen Bill already referred to, he said ; " They must seek the united support of all parties. Their force was a mighty one, and if well handled and directed, should ensure for them a brighter and better future." That is the power you are to exercise to prevent the manager nominating the men to be taught and placing it in the hands of the engine-winders ?—I do not deny it, but you can quite see that the Wigan incident had sprung this out of the groove that we had followed for some time, and there had been created some little feeling of resentment, and for the sake of comfort or something of the kind, we vent ourselves in this kind of way.

26011. (*Mr. F. L. Davis.*) You were telling me how you taught these men. Is it generally the case that the men who were learning really have other work to do, but they come and get their instruction in their own time ?—That is so, excepting if the work they are doing would allow opportunity or certain times of liberty.

26012. I suppose that is generally the case ?—That is so.

26013. A man cannot afford to be doing nothing. learning about an engine and earning no wages at all ?—No,

26014. Have you many landings in most of your collieries in Durham ? You were dealing with the keeps and people getting in and out by themselves. Are there any landings between the bottom of the shaft and the top ?—Usually about three, I think, two or three. I know in one place we have seven intakes, but many of them are just occasionally visited by officials—two and three intakes.

26015. From how many would there be coal raised ?—Not more than two or three—three at the most.

26016. Would there be men in charge there and men on the cage landing the coal and taking off the empties ?—Yes.

26017. At each of those landings there should be ?—There should be.

26018. Your complaint is, there is generally a man in charge but occasionally when there is no work going on the men are allowed to go on and off themselves ?—When no coal is being drawn.

26019. That is your complaint ?—That is it.

26020. Is there not a man at the bottom of the pit always in charge at night time in what you described just now as the least important shaft ?—No, not continuously —at some places, but not continuously. I should think in the majority of places there are men employed, but not for that purpose absolutely. A man may be giving attention to the furnace, or some other work near at hand, and at intervals where large groups of men are to be changed he may have instructions to attend the shaft to see a large group down, but between groups only a few men are riding, men doing repairs, and horse keepers, and nobody is there.

26021. Your complaint is that in some cases the Mines Act is not carried out properly ?—That is it.

26022. It does provide for men being in charge ?—It does.

26023. Your complaint is that it is not always carried out when the work is slack ?—That is the complaint.

26024. (*Mr. Enoch Edwards.*) Let us direct your attention to what seems to be made the crux of this business. In the Rules of your Society you have made special provision to satisfy yourself that these engine-winders are capable men ?—Yes.

26025. As a condition of membership of your Society you must be a capable engine-winder and understand the business ?—Yes.

26026. There is no reason except that he should be a capable man ?—That is all.

26027. I understood you to say that 97 per cent. of them were members of your Union ?—Yes, of enginemen in Durham in our Union.

26028. At any time in the history of your Society, has there been any other object except that these men should be thoroughly competent as engine-winders ?—I know of none.

26029. It is suggested here that you are rather seeking to be managers of the colliery. Is there anything in that ?—No.

26030. Has there been anything in it from the first, except that these men should be competent engine-winders? —I do not know of anything.

26031. When Mr Ellis put the question to you that you claimed the right to say no, you meant there, that so far as your Society was concerned, the man must be capable who was doing his work, and if he is not you say no, and it is on those grounds and those grounds alone ?—Yes.

26032. (*Mr. Ratcliffe Ellis.*) I should like that made clear. If he is a competent man you still claim the right to say no ?—Yes, if he is a competent man we claim the right to say no ; as a trade union we do.

26033. (*Mr. Enoch Edwards.*) You will resign your Rules in favour of any properly constituted body, such as the Home Office, if they will carry out the same functions as you carry out ?—Yes, but still I say that our Society would construct such Rules as would protect a man from being compelled to teach another if that man felt that he was not able to teach.

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26034. I understood you to say in reference to those, that there were men upon whom this condition of things produced a kind of embarrassment ?—Yes.

26035. That is to say, he is a capable engine-winder, but it requires all his attention and nerve to do his work rather than be interfered with by anybody else ?—Yes.

26036. He would not be teaching a man to drive an engine at a busy time when he was drawing coal and men ? —No.

26037. Then why is there the embarrassment ? There are men who are capable engine winders but not capable of teaching, for the reason that they become nervous if their attention is drawn away from their particular work ?—Yes.

26038. It is not because they object to the person ?—No, it is because the men are afraid.

26039. I understood you to say that the employers in the North had told your people that you are responsible if you have in charge a man you have trained; if anything goes wrong, you at the engine are responsible, and not the manager ?—Yes.

26040. Because of that you think you have a right to object to a man ?—Yes; it came about like this. The employers in the North said "Well, but cannot you do away with this restriction; cannot you do away with this regulation of your apprentices, and teach whom we nominate" ? and we said "Very well, we will, provided you will give us a writing of exemption from liability." They said, "We will do that; we will write out a statement that the man would be exempt from liability in the event of an accident when the apprentice is doing winding." When we had the next conference the exemption was read out, but it only exempted us from liability of fines in case of damages and breakages, and we asked, "What about the exemption from what might come to us from a coroner's enquiry in the case of death or injury" ? That exemption did not relieve us from such a liability, and because it did not relieve us from that liability we refused to have it, and Mr. Cooper was consulted and said what the law imposed upon a winder nobody could take off. If anybody was killed while an apprentice was doing the winding, the man in charge would be responsible and liable.

26041. It is because of that you claim your right to say no ?—That is it.

26042. (*Mr. Ratcliffe Ellis.*) With regard to the Rule of the St. Helens Association, "A member who teaches anyone the business of an engineman, unless he is his son or brother, or the son of another member of the Association, will be fined not more than forty shillings." Notwithstanding that Rule you still say it is on the ground of safety that the Rule is made ?—I confess that there are claims made by Trade Union societies that cannot claim very strong justification, and that is one of the strongest reasons that we should ask some other authority to undertake to manage this regulation.

26043. (*Mr. Enoch Edwards.*) If another authority takes this up on behalf of the Government, that is what you wish ?—Yes.

26044. Because in some way these men have to be trained for the work ?—Yes.

26045. With regard to hours, you have a system of three shifts of winders at the surface ?—Yes.

26046. You have not that below yet ?—No.

26047. The hours are much longer below ?—Yes.

26048. In these three shifts you have arranged it that the busy shift should be seven hours, the other eight, and the other nine ?—Yes.

26049. In practice you said if the man who should come on the second shift is ill and does not come, you intimate to the manager, and the third man would come on, and you two would work 12 hours ?—Or following what we do, eight in and eight out.

26050. Supposing a man is out through serious illness three months, what would you do ?—I have known a period of three months worked at that rate.

26051. You put in abeyance your eight hours system ? —No.

26052. Two men do it?—No. Where there are competent men in the colliery I should think generally a man is installed to fill up the vacancy where a long period is likely to occur; but if, for instance, a man's partner is only ill a day or two, or incidentally off a shift, or going away, then a man is not installed.

26053-9. You suggest you only temporarily carry on with two of you ?—Yes.

26060. You referred to a man being in a pit alone. You referred to enginemen and boilermen underground ?—Yes.

26061. There is no reference to the ordinary working pitman ?—No.

26062. Is it common for your man to be in a pit himself ?—No. There are isolated cases, I think. There is a time when water has to be got out, and at week-ends only.

26063. It would happen at week-ends ?—Yes.

26064. You suggested the working during shifts, and you have men in the pit all the 24 hours. I gathered you had that. On Sundays and week-ends you suggest the man would be sent to his pump himself ?—Yes.

26065. That is not a practice, to send a man by himself ? —At week-ends overmen, officials, go into the pit, and horse-keepers and repairers.

26066. He would go in with them ?—He might, but he might continue long after the others had come out. The winder may have other duties than winding, and may be kept there for the sake of other duties about the pit.

26067. Underground, I mean. You are not referring to the winder on the top being kept. It is the person being kept in the mine alone. This can only happen at week-ends, and then the men may look after the horses, and the men who make an inspection of the pit on Sundays like other days. They do not leave the pit to look after itself ?—It appears they leave it with this man only. This man is asked to attend to two engines 500 yards apart in the mine, with no one in the mine but himself at week-ends, and if it is possible in this instance then it may be possible to a wider extent.

26068. So far as I know, from my early boyhood I remember being a companion to a man who worked at a pit alone, and the practice was that a man would not be sent in a pit without some attendant; even the fireman who goes round the working places, would have some one in the pit with him. That was the custom in the Midlands, at any rate ?—Before I became a winder I was employed as pumping-engineman at one of the Durham collieries, and I have had a lad of 14 or 15 with me the whole of the time, but in this case they send no one.

26069. Is that typical of the custom ?—No, I say that is a very isolated case.

26070. (*Mr. Smillie.*) You are aware that this Commission has to enquire into the cause of accidents to miners and mine workers generally ?—Yes.

26071. You stated, in answer to Mr. Davis, that you had in some cases two or three landings from which coal was drawn in some pits ?—Yes, including the bottom.

26072. This is what is generally called mid-shaft ?—Yes.

26073. Have you any keeps in any of those mid-shaft landings ?—Yes.

26074. Do you approve of keeps in mid-shaft landings, as an engine winder ?—Yes.

26075. Are they not a cause of very serious danger to men who are being lowered down the shaft ?—No, I do not think so. I think if they are balanced to move clear they have the opposite effect. If mid-shaft keeps could come out automatically clear instead of falling in, there would not be a danger.

26076. When the cages were being worked in the shaft, would there at all times require to be onsetters at all the landings to make sure the keeps were in the proper position? —Yes, while the men were getting in and out.

26077. Have you known any serious accidents, either in your own experience, or have you heard of any, in the mining districts of the country, which have taken place by the keeps being placed at mid-shaft, the engine winder lowering his cage with men on it, not being aware that the keeps were in ?—I have not. I have an instance here. This is a mid-shaft accident as Bedside, where the man signalled himself away, and got into the cage, and the engineman was too quick for him, and he died.

26078. Were the keeps not there ?—No, there would not be keeps in here.

26079. You have been dealing with two kinds of keeps. You have mentioned another kind now, which would automatically be out of position when put into position by some person for that purpose ?—Yes.

26080. In a case of that kind the onsetter, when he wanted the cage to stop at mid-shaft, would put in the keeps ?—Yes.

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26081. Is there any method of signalling to the engineman to let him know whether the keeps are in at the mid-shaft ?—I know of none.

26082. An engine winder might be lowering to a lower part, and those keeps might be put in ?—It would be the duty of the attendant at the top ; if he had men to get out he would name a seam there are men to get out at, say, the first seam down the shaft, and he would have a signal to give to the attendant to say that there were men coming at that seam, and he would also signal to the engineman that there were men for that seam, so that both the engineman and the attendant would know on this journey that there were men intended to get out there.

26083. Do you say that it is the usual, if not the universal, thing to have keeps, or shuts, at the mid-shafts in Durham ? —No, not in mid-shaft. I say on the surface.

26084. I have been dealing with the landings at mid-shaft where coals and men may be put on to the cage. Is it usual or universal to have shuts or keeps at those places ?—I do not think it is universal ; they are employed in mid-shaft, but not universally.

26085-6. Are you aware that mining engineers in collieries generally condemn the use of keeps at mid-shaft as being very dangerous ?—No, I am not aware of that. I know in one instance, this inquest at Boldon, where the jury regretted that the keeps had not been used ; that was an intermediate position between the top and the bottom.

26087. With regard to the keeps at the surface, would it not be simple for engineman to have charge of the keeps there, so that he could open or close them from the engine-house ? Is it not done in many cases when the banksman is away the engine-winder can, by drawing a handle, either close or open those ?—I do not know an instance of that kind.

26088. Would there be any difficulty in attaching to a handle on the keeps a chain, or some other method of the engine winder having charge of them ?—I should think that was possible. There would be nobody to signal to the engineman from the top in the event of anything taking place during the journey. The men would be running down and left there.

26089. You say sometimes men stepping off the cage at the surface lighten the load ; men might be getting on at the pit bottom, which might make the load heavier, and the engine winder, unless he had a strong brake to his engine, might go away ?—Yes.

26090. Is not an engine winders' brake in all the engines in the country sufficiently strong to bear any alteration in the load of that kind ?—No. Many of them are much inferior to that.

26091. Is it not the case that most brakes used on engines would almost stop the engine with the steam ? —No, that is not so.

26092. Would the keeps in that case you referred to do any good ? Would not the cage in which the men were coming off have a tendency to rise under such circumstances as you have said, and not to fall ?—Yes, it would have that tendency.

26093. The keeps in a case of that kind would not prevent such a thing taking place. Your strongest point is that it is a breach of the Coal Mines Act for men to ascend or descend the shaft without the banksman in the one case and the onsetter in the other case being there to see to that ?—Yes.

26094. If the Special Rule were made a General Rule and carried out you would have no objection ?—There would be no objection. We believe that the spirit of the law is that these men have to be there.

26095. Most of the Special Rules say that the banksman must be attending at such time as the manager appoints ?—I do not want to leave that point just now about the keeps. From what you say it is apparent that the tendency from the men getting in at the bottom and off at the top would be to move upward, but an efficient brakesman prevents that by steam. He is continually resisting that upward tendency. In the measurement of steam he might get an over-glut of steam, which would at the moment move the cage downward. If you had keeps it could not go beyond the point of getting out.

26096. (*Mr. Ratcliffe Ellis.*) The rope would go ?—Yes.

26097. But not the cage ?—Not the cage.

26098. (*Mr. Smillie.*) In a case of that kind if there were keeps in the pit bottom the cage must be at the lowest bottom, because the other cage is at the top ?—Yes.

26099. It is almost universal to have the cage sitting on a solid bottom or bins at the bottom ?—That is so. If there was on over-emission of steam, and the engineman had misgauged the resistance and moved it downward, the loosing of that weight on the keeps would be sufficient to arrest matters. I do not mean the man would send the engine away. I mean his giving resistance to the upward movement may reverse the motion and bring the cage down, but when it reaches the keeps it would be at rest.

26100. The chief point you have dealt with is the qualifications necessary for an engine-winder. Ninety-seven per cent. of your engine-winders are members of your union ?—Yes.

26101. Your Rules at the present time have brought about this position. Under the Mines Act you are aware that a manager is supposed to appoint a competent person ? —Yes.

26102. You say that the Rules under which your Trade Union has been worked up to the present time have given a manager a guarantee if he finds an engine-winder wanting employment and he is a member of your Association, that is also a guarantee that he is a competent person ?—Yes, he holds a certificate of competency.

26103. From your Association ?—Yes.

26104. You are anxious that the responsibility should be taken off your Association, providing a Government department sees that the engine-winders are competent by certificate ?—Yes.

26105. Is your Association prepared to face this position of matters, that a Government department, if the responsibility were put on them to grant certificates by Act of Parliament, might make provision for training engine-winders. Has it ever struck you that might be done outside altogether from engine-winders at your colliery being trained, that the Government department might make provision to train them to secure a sufficient supply ?—We do not believe that they could.

26106. Would you object to such a course being taken if it were proved to you that they did make them competent ?—We would object to our members being compelled to undertake to teach anyone contrary to their will if they were afraid of embarrassment and liability in consequence.

26107. You have dealt with that, and I admit you are correct to protect your own members, but I am putting a position where the training school might be established in some part of every county, where a training could be given outside of your Association altogether ?—That is possible if they sunk a pit and employed a staff and taught men all right, but if their regulations claimed the assistance of the enginemen, well, we would like to say whether we would undertake it or not.

26108. I quite admit your position there, but you are face to face with this, that colliery managers have to have a certificate at the present time ?—Yes.

26109. Have you ever heard of colliery managers objecting to the training of other people becoming colliery managers ?—No.

26110. There is plenty of scope at the present time for the training of colliery managers and granting certificates by the Government ?—Yes.

26111. And the Government provide examinations for these people ?—Yes.

26112. The Government to a great extent endow teachers by giving grants to teachers for teaching ?—Yes.

26113. So that the same thing might take place if certificates of competency were to be granted to engine-winders ?—In the case of managers' certificates, when teaching a man to manage a pit nobody has the liability a winder would have in case a man was killed.

26114. I want to put my position clear in order that you may grasp it. Mr. Ellis and his friends, rightly or wrongly, are of opinion that your chief desire in getting certificates is to limit the training of engine-winders, or that it might ultimately end in that. Providing that you are still to have a training, if the Government took the responsibility of granting certificates, it might also feel the necessity of making preparation for training engine-winders. In that case would your association object to engine-winders trained under the provision of the Government becoming competent workmen ?

26115. (*Mr. Ratcliffe Ellis.*) Not only would it limit the number but place in the hands of the engine-winders the sole right of permitting access to the mines. Do you think the rules would have to be altered if there was a satisfactory

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and recognised way of training enginemen?—Yes. The only provision we would seek to make would be to prevent any man who felt himself unable to teach another, being compelled to try.

26116. That would be a very important qualification, because he might refuse to teach anybody except those he thought fit to teach.

(*Mr. Smillie.*) Provision might be made for the teaching.

26117. (*Chairman.*) Do you suggest that the man himself should decide whether he was a man capable of working an engine and teaching at the same time, or that it should be left in the hands of your association?—In answer to that I will say our first regulations in this matter were like this: a young man could be taught to wind if he could find two men to undertake to teach him, one to propose and one to second. We feel that there is very much hinged on somebody having the responsibility of teaching.

26118. I want to know who is to decide whether the engine-winder is capable of teaching as well as working the engine. Is your association to decide, or the man himself?—The man himself.

26119. (*Mr. Smillie.*) Are you satisfied with the provision that a young man under a certain age cannot be appointed an engine-winder. It is Rule 24?—Yes.

26120. Is there an age limit beyond which a person should not continue to be an engine-winder?—We are very sorry to say that is very largely becoming so, although we know of no legal limit, but really there is becoming a limit—very much so.

26121. Have you known any cases in which miners have had meetings and protested against ascending and descending on cages because of the age of the engine-winder, whom they believed incapable through old age?—I have not known any case of that kind.

26122. You would not encourage the continuance of one of your members as an engine-winder after a period when it was thought that he was too old to do his work?—No; recently we have been making some very extensive changes in our rules for old members. This thing is becoming rather a big question, and we are making allowances out of our funds that we used not to.

26123. There is some age beyond which a person should not continue as an engine-winder?—It is a difficult thing. There ought to be a limit; a man ought not to be continued at engine-winding to the danger of anybody; but with regard to fixing a time I may say we have had men continue winding until 72. We have other men who after turning 63 were not competent to wind.

26124. There is no provision at the present time as to an age limit. There is a provision as to youth, but there is no provision as to old age?—Yes. It is like this, when a man has a long service time at an engine he gets accustomed to it—with considerable ease he manages his work; but if that man become discharged from that engine which has become a kind of second nature to him, he could not get work anywhere else, and that is how they get continued to a higher age than if they had to bid in the market for jobs. They would not get them. In the absence of accident they are continued to a great age, but I think if we fixed a limit that continuity would be broken.

26125. (*Mr. Enoch Edwards.*) The management are satisfied that these men are physically capable of going on with the work?—Evidently.

26126. (*Mr. Smillie.*) It is the men who have to ascend and descend who have to take the risk?—That is it.

26127. The number of men allowed to ascend and descend on a cage is increasing at many collieries because of the number of tubs drawn and the size of the shafts?—Yes.

26128. What is the highest number you know in Durham who may be on a cage at the same time?—24 in each cage.

26129. That is 48?—In the upward and downward journey.

26130. Would you suggest not only that there should be an examination as to a person's qualifications for an engine-winder, but also as to his health prior to his getting a certificate? Would you go further and say that there should be periodical examination of the engine-winders to find out whether their health was such as to enable them to continue as winders?—I think when we have deemed an examination at the start necessary and imperative that we could not object to a periodic examination, and I think, too, that it would be wise.

26131. Have you known any cases in which the engine-winder has had a fit or died at his work?—I think the next witness from Lancashire has a case in point where a man died at the handles: I have not known of one in Durham except one at Usworth a few years ago; the man was found dead in the engine-room.

26132. It becomes all the more necessary that great care should be taken as you increase the number of persons in the shaft at the same time?—Yes.

26133. There are cases where 72 may be on the cage or 144 in the shaft at the same time. In a case of that kind would it not be in your opinion a wise precaution to lay down by law that there should be two engine-winders in the engine-house while the men were being raised and lowered?—It would in the event of a man collapsing through heart failure, but it would not be of any value if a man by misjudgment at the point of stopping did something wrong, because it is so instantaneously given that nobody could intercept it.

26134. It is only in the case of heart failure, or anything of that kind?—Yes.

26135. Is there any method for preventing the over-winding of engines which you yourself have seen or know of?—Yes.

26136. For stopping the engine in the event of the engine-winder neglecting to shut off the steam?—Yes, there is a very effective apparatus at what is known as Mainsworths in Durham. I was there on some other matter and the engineer asked me to go up. It is a large engine, two 40-inch cylinders, and he sent the engine away full speed. About two revolutions from stopping, steam was shut off the engine and a steam brake applied, and the machine brought to a stand.

26137. (*Mr. Enoch Edwards.*) Automatically?—He put the steam on and went away and left the engine, and the speed acquired brought the apparatus into play.

26138. (*Mr. Smillie.*) Are you aware that that can be applied to any engines at present working at the collieries in mining districts?—I should think it could. To me it seemed a very plain and effective means of preventing it.

26139. Do you think it would be wise to provide by law that that or some other appliance of a similar nature should be made compulsory at all collieries where men are wound?—I do not know that such an apparatus could be applied in every shaft, but other arrangements could be applied in every engine; I mean, some of the shallow pits where there are only 20 or 30 fathoms. I do not think that this could be brought about. They would not secure the speed necessary to bring into play what was brought into play there.

26140. Independent of the speed at certain points where the steam is shut off, that automatic arrangement shuts it off. It depends on a certain point in the shaft where the steam is shut off?—The arms lift and bring into play and open some valve when it reaches a certain speed—the arms of the revolving governors.

26141. (*Mr. Ratcliffe Ellis.*) Is that Bertram's patent?—I believe it is.

26142. (*Mr. Smillie.*) If there were any mechanical contrivance would you say it was right to have it by law?—Yes.

Mr. THOMAS WATSON, called and examined.

Mr. T. Watson.

STATEMENT OF WITNESS.*

26143. (1) I am at present employed as agent to the Lancashire, Cheshire and North Wales Enginemen's and Boilermen's Federation. Our Federation contains about 1,500 members, chiefly colliery enginemen and boilermen employed in Lancashire, Cheshire, Flint, and Denbighshire. We are affiliated with the National Federation of Enginemen's and Boilermen's Protective Associations, and I appear as a representative of the latter, which consists of about 15,000 to 20,000 members

* Mr. Watson also handed in the appeal for legislation printed in Appendix II.

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throughout the kingdom. I have had 25 years' practical experience amongst colliery engines and boilers, *i.e.*, 5 years as a stoker at boilers, 17 as a winder, 3 as surface fireman and machinery inspector. I afterwards spent 7 years as a colliery checkweighman, and during that time I acted as secretary to our County Federation of Enginemen and Boilermen, for which I now act as agent. I have also been the President of the National Federation from 1902 to 1906, and have been a member since.

(2) The points I wish to give evidence on are as follows: The want of legal restriction in the Mines Regulation Act as to the hours worked by colliery enginemen and boilermen.

(3) The responsible nature of their work.

(4) The custom as to the hours worked by these particular men in different counties, with special reference to Lancashire.

(5) The hours enginemen have been on duty when engaged in winding men during week-days.

(6) Week-end turns and the risks attaching thereto.

(7) Exceptionally long hours made by enginemen. Common to work 36 hours at a stretch. I have worked 60 hours at a stretch, and I know others who have done so. In one case we were told of a man who was at the colliery two weeks at a stretch. Fatal accidents: Westleigh, in 1896. Skelmersdale in July, 1905. Strong comments by the coroner; the mines inspector's opinion. Woodpark Colliery, Ashton-under-Lyne, August, 1906: coroner's comments. Other fatalities at Radstock and North Wales: coroner's comments. A very serious accident at Golborne Colliery, March, 1907.

(8) The same need for restriction of enginemen's and boilermen's hours at collieries as there is on railways.

(9) Where men work 8 hours they are, at all times, fresh and reliable compared with those working 12.

(10) Men's reports to me where engaged at continuous night work as to how they feel towards morning side when they have to deal with men going down.

(11) I am astonished that miners will tolerate it, as it is a miner's question as much as an engineman's, as the former's life is at stake, which is far more precious than an engineman's reputation.

(12) Nothing short of a legal 8 hours would give the necessary security.

(13) Employers make tempting offers when men attempt by combination to obtain 8 hours; *e.g.*, Lancashire in 1899.

26144. (*Chairman.*) The points upon which you wish to give evidence are, first, want of legal restriction in the Mines Regulation Act as to the hours worked by colliery enginemen and boilermen. Will you tell the Commission your views upon that?—So far as the present Mines Regulation Act is concerned, there is no restriction of enginemen's hours in any shape or form, and we find even the Government recognises that there should be restriction in railway men's hours, and we feel that there is as great a responsibility in the enginemen's hands as there is in the hands of any locomotive driver, and on those grounds we think that there should be some legal restriction. We have other grounds why we feel this. There is not a very large number of accidents due to this, considering the number of windings that take place, but we have had accidents where excessive hours are worked. Sometimes there have been cases where the enginemen have been on duty for 34 hours. I have a case in Ashton-under-Lyne where the man had been on duty for 34 hours when he overwound, killed a man and injured another slightly, but it was fortunate that they were not all killed.

26145. (*Mr. Enoch Edwards.*) Can you say how long ago that was?—That was on August 10th last, at Bardsley, belonging to the Chamberlain Colliery Company, Ashton-under-Lyne.

26146. (*Chairman.*) You give instances of excessive hours, and say it is common to work 36 hours at a stretch. What do you mean by "common to work 36 hours at a stretch"? I suppose you have your meals and a certain amount of sleep in the 36 hours?—It just depends upon what is going on. I have been on duty 36 hours at a stretch many a time, and not had a moment's sleep, particularly in cases where there are breakdowns.

26147. In cases of accident, I daresay, but that would be very seldom?—It has been a very common practice, particularly in Lancashire. I had better tell you the system at work in Lancashire, and it might assist you to gather the methods adopted. We have not 5 per cent. of the places but what are working something like what is known as the 12-hour shift system, and each engineman works 84 hours a week. In some of these places, to give themselves what is called an apparent short turn—the night engineman, who should come on at six, comes on at five, and releases the day man, but that throws 13 hours' duty on to the night man. Their time is supposed to be 12 hours all the week through, and at the week-end, to give a short day on Saturday, like other tradesmen have, the day man looses off at one or two o'clock, and the night man stays on from that time until seven o'clock on Sunday morning, and that is 17 or 18 hours. The system is brought about in the change of shifts, but it is natural where men are working night and day that they want a share of the day work, and there comes a time when the change of shift takes place. It makes it so that they have to work two turns to throw the man on the day turn into the night turn. We had a serious accident at Skelmersdale on July 2nd, 1905. The engineman had been on duty 17 hours. When this accident took place he was pulling the furnace man up the pit, and being in need of sleep he lost control of his engines, and dashed this man into the head-gear, and, of course, he went down the pit. The detaching hook failed in consequence of his pulling his engine up at the point of detachment before it thoroughly got through. But that is outside the question I want to convey to you. This particular man contended that he hardly knew what he was doing, and the evidence went to show that, and the coroner spoke very strongly about it. I have brought the report of the coroner's inquest with me on this particular case, and I think it would be worth while for this Commission to hear what was said on this occasion. This is the report: "Fall of 600 Feet.—Excessive Hours' Work.—On Wednesday, Mr. S. Brighouse, County Coroner, conducted an enquiry at Skelmersdale concerning the death of Thomas Ashurst, aged 51, a furnace tender, of 30, Moss Lane, Skelmersdale, who met with a shocking death at the seven-feet mine of the White Moss Colliery Company, Skelmersdale, on Sunday morning. Robert Arnold, engine-winder, said that at five minutes to five on Sunday morning he received a signal from deceased (who was the only man in the pit) to be wound up to the top. There was an indicator to show when the cage was coming to the landing place, and a bell rang when the cage got a short distance from the top. Witness thought the cage was not quite landed and put on steam. He afterwards should have reversed, but did not do so, and the consequence was that the cage went to the top. The rope broke, and the deceased fell down with the cage into the dib-hole, a distance of over 200 yards. In reply to the coroner, the colliery officials said they had never known the apparatus to fail, and it would not have failed in this instance if the witness had not been trying to remedy his mistake Witness, in answer to Mr. Matthews, His Majesty's Inspector of Mines, said he had then been on duty 17 hours, and had three more hours to work. He did this shift of 20 hours every other week-end. The Coroner's Strictures.—The coroner commented in strong terms on this fact. He said he did not care if the shift was only once a year. It was against human nature to call upon a man to do it. He had a strong opinion that a great many accidents occurred through calling upon human nature to do more than it possibly could do. It would not be allowed in a signal-box on a railway, eight hours being quite sufficient there. He did not care whether there was only one man in the mine or not. His life would be considered in the same way as if there had been 5,000 down the pit." Then we have the evidence of the manager: "Mr. Paul Lea, manager of the colliery, said the reason the man worked 20 hours at a stretch was in consequence of an arrangement between the two winders, so that they could have a Saturday off every other week. It was a common custom in collieries, and was an arrangement with which the Company did not interfere. The coroner thought that another man might be brought in to change the shift." The next witness is Thomas Whalley, a stoker, and this will convince you that the man did not know what he was doing: "Thomas Whalley, stoker, said he was standing near the boilers when the winder shouted out, 'Oh, dear! I have fetched old Tom up, and he has gone down again. Am I asleep, or am I not?'" That is a nice state of things for a man who is in charge of winding. "Only a few minutes previously he had seen the winder take a short walk by the reservoir. After the accident he seemed terribly upset. Edward Williams, surface manager, said it was customary for the winders to have a 'nap' now and again. He had had to knock them up to waken them.

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The coroner said it was harder to keep awake when doing nothing than when working, after so many hours. The winder (Arnold) was stated to be a very steady, reliable man, and that it was his first mistake. The jury returned a verdict of accidental death, and expressed the opinion that the Colliery Company should not allow the winders to work so many hours at a stretch." In connection with this particular case there is the Report of the Government Inspector, Mr. Hall, which deals with it, and he seems to come to the same conclusion as the manager, that these long hours worked at week-ends are simply for the convenience of the enginemen. I do not want to find any fault about the action of our inspectors. I think we have as good a staff of inspectors as it is possible to get; but, after all, I do say this: In connection with these excessive hours, I think a little straighter and a little more outspoken talk would be better on their behalf, and the recommendation of some restriction, because when we find a system which allows a colliery manager to permit men to work up to as many as 36 hours—and I have worked 60, I may tell you—that is a clear proof that there should be something in the Act to put some restriction on this particular class of men.

26148. Under what circumstances did you work 60 hours at a stretch?—It was in consequence of having no one to relieve me.

26149. Owing to sudden illness or what?—No, it occurs in this way. As a rule at collieries they keep a bare staff of men and if one falls off bad the other men have to do the work amongst them. Sometimes if there is an extra job it may mean men having to work extra time. The idea in my mind is this, that that should not be tolerated. They would not allow a man to be on duty that length of time on a railway under any circumstances.

26150. When you were made to work 36 hours, which is an extremely long time to be on duty, you say that the usual reason was that there was some accident?—It may occur through accident or through the man that mates them not attending to his work.

26151. Under ordinary circumstance you have to work once a week at least 24 hours?—That is so—once a fortnight.

26152. You would have to work that length of time without any accident or any reason. At the end of that 24 hours, or some time before, you did not feel specially competent to perform your work?—That is quite natural. In this particular business the work may not be heavy and laborious, but, after all, it is of a tedious and fatiguing nature, and you are generally in an atmosphere that is not anything to compare with the atmosphere in this room. The effect of having all this responsibility of the men's lives on your shoulders is to weary a man to the extent that when he is getting to the time when he has to deal with the men, I say he is not what he ought to be. When a man has been on duty almost the full length of hours, that is the very time that he has to take in hand the lives of the men. Take a man who goes on day duty at six o'clock in the morning and stays on until five o'clock at night. After he has had a good hard day's work, close on three or four o'clock, when he is worn out, he has to deal with the men—just the most important part of his work to do when he is least capable of doing it. Then take the night man when he goes on duty at five o'clock at night he stays on all night. In some places they are not hard-worked, but in some places they are as busy as in the day. With a night man he does not get the same sound sleep in the day, and he is not as efficient to do the same amount of work in the night time as in the day time. These men, after spending 13 hours at the pit during the night, have to set to the last thing in the morning to let 500 or 600 men down the pit, and we have had some very narrow escapes in this business: in fact, we had a serious accident at Westleigh in 1896, where the engineman had been on duty 13 hours: instead of letting down eight men he had in the cage, he took them into the head-gear and the detaching hooks in that case failed altogether and the men were all lost.

26153. Why did the detaching hooks fail?—In consequence of being out of order. That is an argument that they ought to be kept in order as well: but, after all, the man had been on duty 13 hours. We had another case in September, 1903, where we had an engineman at Astley and Tyldesley. He had been on duty 13 hours, and as his brother was going into the engine-house he fell backwards and died, and he managed to get the steam brake on. That man had 24 men going down the pit with 500 yards to run. If he had not had time to apply the steam brake what would have been the consequence? There would have been 24 more deaths as well. We have had other cases. We have had about three to my recollection within the last six years, where the engineman has been found dead in the engine-room in that fashion.

26154. Three altogether?—Two besides the one I have mentioned. There was the case of Joseph Whittle, at Wigan Junction, in about June the year following, when this man died at Astley and Tyldesley about June, 1903. Then we had Jabez Mann: his death took place——

26155. At all events you have had three deaths?—We have had three deaths within the last 5½ years.

26156. I suppose you had inquests in all those cases?—Yes.

26157. Did the inquests show that by examination of the men you could have found out that they were unfit to do the work and liable to sudden death?—In these cases the verdicts were all brought in as deaths from natural causes.

26158. Were the diseases from which the men died suddenly such as could have been found out by medical inspection?—The report does not give that. I have the report of the inquest.

26159. Does not the report say anything about that?—Take Jabez Mann's case at the Yew Tree Colliery. I will give you the date in a moment.

26160. I should like to know what the verdict was?—In his case the verdict was that he died from an apoplectic seizure. He had been on duty only four hours when that occurred.

26161. That could not have been discovered by medical inspection. The doctor could not have said he was liable to apoplexy?—I am not so versed in medical science as that. Some people contend that apoplexy would arise from a heart disease or being out of order. In that case it was attributed to an apoplectic seizure. In the case of Joseph Whittle the verdict was a similar one. You cannot claim that it is in consequence of these men being on excessive hours at the time they died, but it shows the responsible position they hold and the great risk they run, and that even if they have been on only four or five hours when things of that sort take place, we do not know how much of the remaining portion of their week's work may have brought them down to that low state when collapse comes on. With miners it is common for them to wish for Friday night: they could not keep on another week without the rest. The same applies to enginemen working excessive hours: they gradually grow worse near the week-end. What I wanted to call attention to with regard to the Skelmersdale accident was this; Mr. Hall states in his Report that it is a matter that rests more with the enginemen, and it is for their convenience that the turns are changed at the week-end. I want to ask the Commission this question; if men are tied down to work 84 hours out of a possible 168 the clock goes during the week, does it not mean if they are to change from night turn to day turn that they will either have to work long turns or otherwise be off at shorter intervals, and both are objectionable when men get into that tired state?

26162. Have you considered the question of mechanical appliances to assist an engineman doing his duty, so that it will not so much matter whether he makes a mistake in winding? For instance, with regard to ~~kepts~~ keeps. Do you think there ought to be a regulation with regard to kepts being in a position to be worked?—Certainly, they are a necessity, but there is a difference of opinion as to their use. For my own part I believe in kepts at the top and at the bottom, but I do not believe in their being in use in the centre of the pit.

26163. Why not?—We had a serious accident in St. Helen's district a few years ago and eight lives were lost. They had kepts at a mouthing in the pit and they worked a semaphore in the engine-house. When these kepts were out ready to receive the cage, the semaphore was out before the engineman, and there was a signal that you should not go there, but the signal failed on one occasion when the kepts were out, and he was dashed down with a lot of men and they were all killed. I think they are dangerous to have in the middle of a shaft. To meet that difficulty they want an adequate brake, one that will hold the engines equally as securely as the kepts themselves.

26164. It has been suggested a difficulty may arise owing to the engineman not knowing how long to wait before he raises the cage. If he waits too long the man will think that he has given the wrong signal and step out when it is being raised?—I like kepts at the top of the pit in particular for this reason. I have had about

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25 years' experience amongst engines and boilers and in control of them. I have had to do with kepts and without kepts, but as a rule when you are lowering men where there are kepts, I have always found you were less liable to start off with a wrong signal and do more damage than you would if there were none for this reason. When you are at an engineman's handles, the men come to work, in the morning and run about the engine-house and shout, and you get false alarms, and if there are no kepts you are likely to start with a false alarm when men are getting into the cage. If there are kepts he cannot do any damage to these men so long as they are under the cage until the browman is ready. We have some places where the browman keeps charge of the kepts and we have others where the enginemen manipulate the kepts as well as the handles. I think that is a failing, because a man, if he has control of his kepts as well as his engines and starts under the assumption that he had a signal when he had not, would start his engine off and pull his own kepts from under, and it would be better if the kepts were in independent hands. In that case there would be two strings to the bow to prevent an accident.

26165. You are in favour of kepts being at the top and at the bottom and not intermediate ?—Yes.

26166. Would you also say that there must be a bottom man to see that the kepts are in order and manipulate for himself ?—That is so ; at some places they have the kepts at the bottom and not on the same footing at the top. At the top they fall under the cage themselves ; at the bottom they fall out. They have to be pushed under the cage ; that is the difference. If they were to be neglected they would have fallen clear, and if he wanted to let the cage sit on them he would have to push them under.

26167. You do not in your statement say anything except about hours. You do not make any suggestions as to certificates being necessary ?—I have given evidence upon this question before the Select Committee in 1901.

26168. You would like to refer to your evidence there ? —Yes, my evidence there is my opinion upon that particular point.

26169. You simply refer to that evidence ?—Yes.

26170. It there anything else you would like to say ?— There are several other questions besides these kepts. The question of hours I have not gone into as fully as I should like to. I want to point this out to the Commission, that this is a most responsible position, and it is a great responsibility on the Government in neglecting to put them on reasonable hours, and particularly not to have any restriction whatever on their hours. Take the number of miners ; from the miners' standpoint they have to descend and ascend under these men's hands once every day, and it means a matter of nearly 800,000 men. When you examine and find that these men are put under such risky conditions of riding up and down, being wound by men who have been on duty 12 and 13 hours, I say that it is a national crime to permit it. When you look at the question on Monday morning as a rule there are about half of the enginemen in the United Kingdom that are working 24 hours at the week-end. In Lancashire three-quarters of the men work 24 hours at the week-end. You have all the miners throughout the kingdom going down on Monday morning week in and week out under men who have been on duty for 24 hours. It is a matter of nearly 800,000 men going down on Monday morning being wound by men who have been on duty for 24 hours. I think it is a serious thing and ought to receive the strictest attention in any alteration that is made in the law. There are some employers who are very good and have met this question. In Durham they have had the eight-hours principle at work since 1872. In South Yorkshire they have it at some places, and also in West Yorkshire they have it at some places, and in North Staffordshire they have it as a custom. In Lancashire it is only here and there, and so far as the hours are concerned there will be no remedy until the Government takes the matter in hand and puts its foot down and says there must be a limit to these hours. In Lancashire they have been anxious to get it, and they have worked themselves into shape. In 1899 they worked themselves up to that pitch that they intended to have it if it meant a strike, and they put in notices. All the enginemen in the county served their notices, and it went to the extent of being about 24 hours short of all the pits being stopped, when of course there were tempting offers made which they could not resist, and it broke up, and since then there has been a still more bitter prejudice against the eight-hours system amongst employers than there was before, in consequence of the inconvenience it would cause to them. I think that something should be done not only in the interests of this particular class of man, but in the interests of the miners whose lives are entrusted to their care.

26171. (*Mr. Enoch Edwards.*) Could you say why you have so arranged that men should always have to go down when a man has been on so long ? Why could not the new man be there and let the men down in each shift ? I mean why could he not start his work by letting the men down ?—The position would be better if the men were put on at eight hours and should always be fresh.

26172. Even with that you would have the same difficulty ?—We have had accidents even when a new man has just come on duty. He has perhaps not been as good as a man who has been on an hour or two. The sole remedy for this business is eight hours. We have men working eight hours and they can go to their work at any turn and are always fresh and feel in good condition, but if you talk to 12 hours men—I have some in St. Helens who are busy during the night time and they tell me that at 2 or 3 o'clock in the morning they scarcely know whether they are standing on their head or their heels. That is not a fit state for men to be in who have to handle 400 to 600 lives. If there is anything serious taking place the enginemen under those conditions could come on sooner. It is a recognised custom with all classes of people that 6 o'clock is the time to go to work in the morning, but there are exceptions.

26173. The collier would have to go before six ?—There are exceptions when the men go at 5 and 4. It would mean that they would have to go on at 5 to meet the difficulty. That does not meet the difficulty of shortening the hours. Anyone will admit that 12 hours is too much at this work, and if they work 8 hours, whether they go in at 4 or 5 o'clock, they are always fresh.

26174. It is not necessary as a matter of arrangement whether it is 12 hours or 8 hours. It is not necessary for the man to be on all those hours before he lets the man down. It can be arranged that he shall be fresh when he lets the men down ?—That is so, if you do that.

26175. You could do that in 8 hours just the same ? —The colliers' hours are not 12. If a man goes in at 5 o'clock in the morning on purpose to deal with these daymen, his mate should come, by virtue of the system, at 5 o'clock at night to liberate him. That man that went in at 5 would let the men down in a fresh condition, but he would bring them up in a worse condition at night.

26176. The other man would be there ?—He would have to be on a matter of 13 hours and come in at 4 o'clock. He would have to come in two hours sooner, because they start coming up at 3 o'clock.

26177. If he had 8 hours it would be better for a man to go on fresh to handle men ?—If you come into conversation with the men, I do not care how busy they are, they will tell you that they always feel fresh every hour that they are on duty if they are 8 hour men, but an ordinary engineman working 12 hours in and 12 hours out, and he is working four hours more and he has four hours less time to recuperate, and he gets into a worse condition at the week-end than a man who is working 8 hours.

26178. (*Mr. Ratcliffe Ellis.*) In Lancashire the hours are 12 hours ?—Yes, as a rule.

26179. That is the maximum ?—No.

26180. The change at the week-end makes it so that a man is on duty for 24 hours ?—Yes.

26181. If he works longer than 12 or 24 hours it is because some accident has happened, either his mate does not relieve him or some exceptional circumstance ?—Yes.

26182. Do you think that 12 hours is too long ?—I do at that particular class of work.

26183. You fix the time of efficiency at eight ?—Yes.

26184. That of course is a question of opinion ?—That is so.

26185. The man on night duty when not winding coal in the night has nothing much to do ?—It just depends. In Lancashire in particular there is a deal of dirt winding and in some cases water winding. In some places they have to take charge of their boilers. There are some few places where they are worked equally as hard as in the day. but as a rule it is a little bit easier at night.

26186. Can a man do that work for 13 hours. There is a difference being on duty at night, when there is very little to do, and being on duty in the day when a man is occupied the whole time. Would you draw no distinction between the two ?—No, I should not, because there is a very large proportion of the pits where there is something going on now, either dirt winding or letting timber down, or something like that.

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Mr. T. Watson.

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26187. What is going on during the working shift?—That is so. As I explained, those particular men being on night turn, and not having their natural sleep, are not as capable of doing a night shift of 12 hours as a day man who works 12 hours and gets his natural night's sleep.

26188. At any rate, you would make no difference?—Their standard of vigour and efficiency is of a lower rate during night work than day work, and any workman in the country will tell you that.

26189. You draw no distinction between the two?—No.

26190. There should be no more than eight hours in a shift?—No.

26191. Mr. Edwards has asked you with regard to eight or twelve hours' shifts, whether it is not a matter of arrangement so that the tired man should not put down the men in the morning?—That is so. In an eight hours' system with all the men I have spoken to—there are thousands of them, but not in our county, I wish they were—they always tell me it does not matter whether the men come at the beginning or the end of that shift, they feel reliable and have confidence in themselves.

26192. You have been an engine-winder?—Yes.

26193. You say from your own experience that is so?—Yes.

26194. You feel tired, and you think that 12 hours is too long a time?—Yes.

26195. The character of the engines has been improved in late years?—Yes.

26196. So that there are more mechanical facilities?—There are, but after all, with all these facilities there are none that are as perfect as a reliable man. There are certainly checks and preventives, but it would not do to depend entirely upon them, the attention of the man is required.

26197. But still, mechanical facilities are of much greater assistance than they used to be?—In following up his work they are there, and to a great extent some of them are reliable, but not completely, and a man has to be as alert with mechanical appliances as he has without them.

26198. Do you know Bertram's patent?—Yes.

26199. It is in use at the Wigan Coal and Iron Company?—Yes.

26200. What do you think of it?—A very good patent, and one likely to prevent a lot of accidents. We are acquainted with Bertram's patent, and know that it can be made to fail. We can point out conditions under which it would fail.

26201. It does not put any undue strain on?—Not as a rule.

26202. It gradually slacks the speed without any jump?—Yes, generally.

26203. You think it is a good thing?—I think it is a useful thing, but after all you want the attention of the engineman. There is this in connection with all the patents we have seen. The load for an engineman to handle is of a variable nature. He may have two tons at one time, five hundredweight at another time, or one ton going down. These mechanical contrivances are safe under certain conditions, but they do not meet all the variations in the load.

26204. You do not object to having him assisted so far as possible?—Certainly not.

26205. You think Bertram's patent is a useful apparatus?—I believe it is very useful and has done a lot of good, and may have saved a lot of destruction, but the engineman's liability and responsibility, and the care and caution required about his work are just as heavy as they were before.

26206. When you gave evidence before the Select Committee you gave your views as to certificates?—Yes.

26207. Do you think it desirable that there should be an examination for enginemen, and that they should be certificated?—I do.

26208. You would go to the extent of saying that no person should be allowed to wind up or let people down a pit who is not a certificated winder?—That is my view.

26209. How many winders are there in the kingdom, do you suppose?—I could not tell you the exact number, but I should think there would be a matter of 5,000 or 6,000.

26210. That would be the very outside?—Yes.

26211. In order to get the certificate a man must have experience: he must be taught by somebody?—That is so.

26212. Are you aware that any difficulty is made by enginemen in teaching the men?—There are certain rules in different societies of a stricter nature than others. The first principle with regard to certificates from my standpoint is this. If there was a new staff entirely wanted to-day there are sufficient already in the field to fill those positions. The question of learning and the methods adopted are only a secondary question. The first question we want to ask ourselves from a national standpoint is this: Will it give greater assurance that the men at the handles are a class of people fit for that particular work?

26213. The rule of the St. Helens Association of Colliery Enginemen is: "A member who teaches anyone the business of an engineman, unless he is his son or brother, or the son of another member of the association, will be fined not more than forty shillings." Is that a rule they have?—Not at present; that has been revised. You have an old copy.

26214. What is the present rule?—The present system is this; they naturally, the same as every other class of man, cling to their own brotherhood, and give them the preference if they can. Assuming I am working at a colliery, I may not be related to a member in St. Helens—I happen to be general secretary for the county, but if I am not related to any member and I was a winder for a hauling engine, and there was a vacancy, their rule is this: if a man has a preference for the job he has to be instructed, no matter what the relationship is.

26215. Do you agree that the manager may require the engine-winder to teach a man or teach a boy?—That has been attempted.

26216. Do you agree that it should be part of the engine-winder's duties to teach anybody sent to be taught by the manager of the colliery?—Not exactly. My idea is this: if I have brains to give away, I want to have some choice whom they shall be given to.

26217. Do you say you are to be the judge as to who is to be taught?—The manager of the colliery finds the machinery to practice on, and they like these men being instructed because as a rule they have given them something, they have given them a trade, and they can deal with such persons easier from the manager's standpoint.

26218. Is it your view, on behalf of your society, that you and you alone must decide who is to be instructed?—No. I will give you the Wigan Association rule, if you like, on the learning question. I think Wigan has been looked upon as one of the most clannish and selfish class of engine-winders in Lancashire, but they even go so far as to make this provision, that, in the event of there being a scarcity of enginemen, that they will confer with the colliery manager as to who is the next best person to be learned.

26219. Is this the rule: "No member of this association shall be allowed to instruct any person in the business of engine-winding so long as there are competent persons of respectable characters who are out of employment, and who are members of this association; but if there are no members out of employment, then the committee shall have power to confer with the management of collieries with a view to the next best person to be learned or instructed. It shall be optional for a member to instruct his son, if he deem it necessary, for the purpose of making him a competent winder only, but a member's son shall not have preference of a vacant situation before a member of this association. If it be proved on the testimony of two witnesses that this rule has been violated by any member (after the issue of these rules) such defaulting member will be expelled from this association." Could a colliery winder, as a member of your association, teach a person sent to him by the manager who was not a member of your association?—No, and a colliery manager would have no right to do that, because when that manager is sending a man he is giving the use of the engines, but the engineman ought to have the control as to whom he is going to give his intelligence to.

26220. If you had your way a man could not be taught to qualify for a certificate unless he was a member of your association and had your sanction? Then no person can get into the mine who has not got a certificate, so that it would practically place your association in command of the gate of the mine?—I think that is meeting the ghost before we get to the churchyard.

26221. Is not that the effect of it?—It is the possible effect, but the very improbable effect.

26222. Supposing that scheme was carried out, you suggest you could prevent, if you chose, a mine-owner going into his own mine?—It is within the limits of men's

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capabilities to prevent mines being worked at all, for that matter, but we are supposed to exercise good judgment and common sense and plenty of conciliation.

26223. You have to be the power to exercise the judgment ?—No. In my own particular case, and this is given with all these restrictions—I know you have possession of a lot of these rules at different branches, but with all these restrictions you do not find any scarcity of engine-winders in our county.

26224. You are the person who has to exercise his common sense. I will put it plainly to you. In case of some disturbance between the owner and the men you think that you should be entitled to say whether the mine owner shall go into a pit without your sanction ?—It might ultimately work into that shape under some extraordinary condition, but I say that it is not practicable.

26225. Is it a reasonable thing that there should be any legislation which might result in that ?—If I thought it would lead to that I would not advocate it, but I say that it is very improbable that it would ever lead to anything of that sort. There is the other aspect of the question that we want to look at. You say it does not matter to me whether the owner of the colliery thinks the engine-winder capable or not. I insist on a man making himself capable before taking up that position. You have proof from an independent authority that a man is a capable and reliable man before he is appointed a colliery manager. You say that that is giving you a better class of colliery managers. Our contention is that it would lead in the same direction in bringing about a greater state of efficiency in colliery enginemen. At present a colliery manager can put an engineman on ; it does not matter if he has a qualification or not, if he is prepared to take the responsibility. There are not many who will accept the responsibility, but there have been cases where they will, and a manager can put at the handles anybody he thinks fit. A colliery owner cannot put on anybody he thinks fit as a manager, because the Government say, "We want a voice as to whether that man is capable or not."

26226. Supposing there is an examination by the Home Office to secure competency in a man, would you say it was reasonable that the manager should be entitled to require engine-winders to teach any person he may send to be taught and qualify for the certificate ?—I should say certainly the manager should have a voice, and the man who gives the intelligence ought to have another voice, and it ought not to rest entirely with the manager.

26227. Is the voice of the man to be "I cannot teach this man" ?—He has or ought to have a voice in the matter. It is the same in my business as in that of any gentleman sitting round this table. We all please ourselves whether we will teach anybody our trade.

26228. The engine-winders are a class of men 5,000 in number, and they practically have the control of the engines of these mines. You agree with that ?—They do not claim to have the entire control.

26229. Supposing you say "I will not teach this man," then he cannot qualify. He must be taught, and if you say that, it really places in your control the gate of the mines of this Kingdom, an association of 5,000 people, but there are over 800,000 people engaged in the mines, and I do not know how many millions of capital, and you think that an association of 5,000 people should have a right to say whether these mines shall be entered or not ?—As far as this is concerned there is this feeling amongst this class of men, that there has never been a scarcity of enginemen.

26230. You will not answer my question ?—Allow me, we want to look at it from both sides. I will admit, for argument's sake, that the whole control of making enginemen would be in their hands, if that will satisfy you. It is in their hands now without certificates.

26231. No ?—Exactly so.

26232. You say, notwithstanding that there might be an examination by the Home Office, so as to secure that there should be no question about a man's qualification—— ?—It is the principle of an examination.

26233. Notwithstanding that there should be all that care taken, you think you should still have the right to say whether a man shall be taught or not ?—I contend this, and I want to be honest in the matter. The men who have anything to give away in the shape of knowledge ought to have some choice in the matter, whatever vocation they may be in.

26234. You have in your rules a payment to be made ?—In some of the Branch Rules.

26235. That does not satisfy you ; you must not only be entitled to receive payment, but have the right to decide to whom you would give it ?—That may be in some instances, but the principal of certificates—I wish this question of learning and the future difficulties were made into a little less bogey than they really are.

26236. It is easy to do that by saying the manager shall have the right to send a person to be taught on payment of a certain fee ?—That is so, but the manager ought to charge for his own brain and not other people's.

26237. If it is not your object to have the control of these men, why put this difficulty ?—We are not wanting to put a difficulty, and I wish to disabuse this Commission's mind of this. In asking for certificates, it is not to create a corner in the business of engine-winding.

26238. If that is not your object, why object to a right to send a man to be taught ?—It becomes a secondary question. That is the first consideration, that the nation should be sure that we have capable and qualified men at those jobs, with an additional proof, apart from the manager's choice, that they have undergone some examination, and that they have some technical knowledge.

26239. The examination question I am not disputing ? —That is what it would lead to.

26240. Supposing there is an examination by some competent authority to satisfy the men that the man is a competent winder ; if it is not your object to make a corner, why do you object to the manager having a right to say to an engine-windor "You must teach this person his business" ? You make a certain rule that there shall be a payment of £5, and for that payment you must teach this man ?—Take, for instance, the creation of colliery managers ; they claim the same right, and they charge premiums, but still there is no corner in that business.

26241. If it is not your object to make a corner and secure that no person shall be a winder who is not in your association, why do you object to the manager having the right to send a person to be taught, if he pays the fee ?—I object to the manager having the right. He may be the manager of the colliery, but when I come on that colliery as a practical engineman I take my brains and knowledge with me, and I claim to have the sole control over them as to who I shall give them to. That is my idea. I am prepared to confer with the manager, and I wish to assure you that we have no desire to create a corner.

26242. Your conferring would be to say, "Very well, I shall not have him" ?—I say that the man who has the brains to give them should have some choice who he is going to give them to. In this business colliery managers have certificates, and it has not created a corner with them. The marine engineers have to pass an examination.

26243. There is no association ?—There are associations in both cases.

26244. No association which limits the persons who can be taught. However, we cannot get any further with that ?—No. Of course on the learning business I think, speaking generally, that there has been far too much made of the difficulty which would be experienced in getting men after they have certificates than there is any need for. I think there would be no difficulty. It would bring about a system of men fitting the groove they would have to fill. Now it is in a loose and disorganised state.

26245. Do you think it desirable that in a Bill there should be a provision enabling the Home Office to approve people other than those with certificates in case any difficulty of that sort did arise ?—I should, certainly, allow the Home Office to draw up its rules.

26246. I want to go further than that ?—It could draw them up in such a state that if exceptional circumstances arose there ought to be exceptional provision made. I do not see that they ought to risk a man's life or even a mouse's life in carrying out what they feel to be their strict rights.

26247. A very limited number of men in comparison with the great number employed in the mines might have control of these mines and prohibit the owner getting into his own mine ?—I think you are making rather more of that point than what there is in it.

26248. What difficulty have you in saying by all means let the manager send a man to be instructed ?—I say, by the natural state of evolution, if this question of certificates was looked at by the Government in a right way and as a security for having good men, and it were adopted, the other evil you fear most would gradually be met as they approached it. Instead of that we are going to it direct.

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Mr. T. Watson. July, 1907.

26249. (*Mr. Wm. Abraham.*) Do you know any case where the Enginemen's Society have prevented any owner getting to his colliery?—Not that I am aware of.

26250. Do you know any case where the Enginemen's Association have prevented a sufficient number of winding men being trained?—We have never experienced a difficulty in all my time for men. In Lancashire to-day, where I am, if there is a vacancy there are generally half-a-dozen men for the job.

26251. All these questions put to you are with regard to things which are problematical?—Yes.

26252. You have nothing in fact, to prove that it ever existed?—That is so.

26253. What time in the morning do your men commence going down the shaft?—As a rule, in our district, they generally commence to go down about five or ten minutes to five, and they are going down until six o'clock.

26254. Ten minutes to five?—From ten to five they are going down until six o'clock, as a rule. They cease to give them lamps about ten to six, so as to have all the men on the pit-head, and have a clear start at the coals at six o'clock.

26255. When do they come up?—In our district the hours of the miners vary slightly.

26256. (*Mr. Enoch Edwards.*) What do you mean by "our district"?—Lancashire.

26257. No particular spot, but Lancashire?—That is so. I happen to reside in Lancashire. I do not know about the miners all over the county, only the enginemen, because it is out of my province, but I know about it to some extent. As far as the miners in our district in Lancashire are concerned, they are supposed to be down from six o'clock in the morning to four and some up to five o'clock at night. We have collieries where the men are going in at five and ten minutes to in the morning, and come home at half past four and twenty to five at night, almost twelve hours, and not ten minutes' walk off the colliery.

26258. (*Mr. Wm. Abraham.*) As a rule nearly twelve hours a day?—That is so.

26259. How many days a week?—When working ordinary time it is five days a week. Now and then they get six. When times are bad it sinks down to two and three.

26260. When they work six days a week do they work those long hours every day?—No. Generally on Saturday they go down at half past four or a quarter past, and they are coming up again at a quarter past one on that particular day.

26261. On that day only?—That is so. That is what they call their short day. Other tradesmen participate in that.

26262. What engineman puts these down in the morning, the one who has been there from five o'clock?—From five o'clock overnight: that is the custom.

26263. He will have been there, before he finishes, thirteen hours?—That is so.

26264. The other engineman commences with the winding of coal?—That is so. As a rule they generally get there about five or ten to six, and commence with the coal winding.

26265. Do they bring the day men up?—They bring the day men up at night. If they came in sooner the day man would have both lots of men to deal with, and the night man would have none.

26266. How is that?—Supposing the day man comes in at five instead of six in the morning to deal with the men in a fresh state, instead of leaving it to the night man he would have the men to let down that were going down, and if the men were coming back by three o'clock he would have to pull them up at the other end of his long turn.

26267. The remedy would be worse?—One would be as bad as the other. The only sure remedy is a general eight hours' day. That is my opinion.

26268. Have you any other object whatever in securing competent men to be engine-winders than the safety of the men that you put down and take up again?—There is no other object, to my knowledge, and I have had to do with the leading part amongst our men in Lancashire. I have been amongst them in an official capacity since about 1894. I have been the President of the National Federation of Great Britain about four years, and I have been on the Executive, apart from being President, for two years, and in all my experience I have never heard it hinted that it would give us a monopoly. It has been done with a view to being assured that there was a state of efficiency, and where that state of efficiency is we know that lives are more secure, and the men's reputations are better.

26269. In order to make that more secure you think it is essentially necessary that each engineman should be examined and pass an examination, and have a certificate of competency before he is allowed to become a winding man?—I think it would have a tendency to put it on different lines and provide that reasonable efficiency which we find increased power in engines is demanding, as pits are going deeper and tonnage is getting greater, and working is at higher pressure, and the machinery a man has charge of now to look after and attend to is almost three times as much as it was in the olden times. My idea is to keep with the times, that it is necessary that there should, for the future generation, be some examination; otherwise, I am afraid, they will not have the same excellent result shown by the present generation.

26270. Even with the assistance of improved mechanical appliances the strain on the engineer in the work he has to do is as great?—Because he has additional mechanical power to see to, and that gives additional responsibility, and he has to exercise additional care. His attention is required as if those mechanical appliances did not exist, because they have to be watched to keep them in working order, although the results are beautiful; but when you see where there has been a serious calamity and these things have come to the rescue and prevented it, that is the beauty of the business; but so far as relieving enginemen of responsibility and care, I say, it will measure up to a very small quantity in a week's time.

26271. With all the assistance of improved mechanical appliances it has not reduced the necessity of a man being a thoroughly competent man as an engineer and as regards his physical abilities?—That is so.

26272. (*Mr. F. L. Davis.*) Do you know any case or cases where the enginemen have threatened to strike because the management wanted to appoint a certain man to be a winding engineman?—I knew a case where the enginemen struck, but it was in consequence of the management irritating them to that extent by sending a man to every one on their jobs, which made them believe that they wanted to make men for their jobs and turn them away. That was in 1889, and a lot of men were put on when the men struck, but it was under very trying conditions. There had been a difficulty; all the enginemen in the county had notices to insist upon a eight hours' day, but they withdrew, and everything was peaceably settled by every firm except this one. This firm, I do not know whether they wanted to play at Napoleon or not, were not satisfied with the victory over the men and they put a man at every man's engine, to let them see how they behaved, and they took it in that spirit and struck. That is the only time in my whole existence that they have tried to prevent men learning, but it was when they were trying to learn them in a wholesale fashion, which was against them, and human nature rebelled against it.

26273. That was where men were put on with other men to learn?—Yes.

26274. Do you know any case in which there has been a vacancy where a winding engineman has died, or had to leave, and somebody else was wanted for the post? Do you know any case where the other winding engineman already there struck because the management wanted to put a certain man to that vacancy?—I do not know any, but I do not want to assume that it is impossible under the circumstances. Wherever it has occurred it has put the colliery management under very little difficulty in a general sense. It may have been done in an odd place, but I believe that they are bogies we need not fear as causing interference with the coal trade.

26275. Taking it generally there has been very little trouble between the management and the engine men?—I think on the whole, with the exception of this dispute, to the best of my recollection all over the kingdom there has not been a class of men who have had less disputes with their colliery owners, nor about the mills.

26276. I think we are all agreed there?—I think we can say that for the enginemen. They have not shown that fighting disposition, and we do not want them to.

26277. Do all the enginemen in Lancashire belong to that association?—I think we have 90 per cent. just now, and the others are coming in. The Trade Union wave is bringing in these men just as the miners.

26278. When you have these long hours in Lancashire, when do you clean your engines?—In some places they have very large engines for winding from these deep seams,

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and there is a tremendous amount of polished work about them, and the owners like to have a nice class of engine with bright work about it. As a rule that finds the enginemen plenty of work to do, and they are not so idle as Mr. Ellis suggested. They have to keep these things to perfection. In some places they have a boy to help them, but very rarely in Lancashire, as it is chiefly done by the men themselves.

26279. You would work for a fortnight on day turn ?—No, a week.

26280. Is it every week or fortnight that you have 24 hours ?—Every fortnight. You get an 18-hours' system the other week end. You go on on Monday morning at six o'clock, work till five Monday night, and then go on at six o'clock in the morning till five o'clock on Tuesday, and every day right on till Saturday, and on Saturday you come on at six and knock off at one. You have to do what your mate has been doing the week following, to make up the difference in the round of the clock. You come on every night and stop until six right down to Saturday, and come on at one o'clock on Saturday and stay on till six o'clock on Sunday morning. You have 168 hours to work between you, and that time is divided in this shape. They have one half of the time the clock is going, to be on duty.

26281. You thoroughly overhaul your engine once a week, or your mate does it once a fortnight, and you do it once a fortnight: that is once a week the engine is overhauled ?—In these days we have coupled engines, and a man says, "You have this, and I will have that." They take the responsibility of keeping them up to the mark, and there is a competition to try to get them one as good as another. It cannot be neglected for a week. There is something to be done every day on those engines. They have to be wiped down, and the glands touched up. There is something about an engine to be done if there is no coal winding in the 24 hours.

26282. Do you stop in the middle of the day during the shift ?—In some collieries. At R. Evans and Co.'s colliery in my district they have two half hours for meals. It runs in ten and a half with the meals. In some collieries they wind from six to three, and they have a clear half hour for meals. At some collieries they wind from six till three and never stop. In the case of our Lancashire collieries, where our men are situated like that we have a system that they send a relief man to wind for half an hour, and in some places they give two hours relief for meals out of the twelve each day. We have not much to grumble about on that score. The great bone of contention is the length of the shift itself.

26283. (*Mr. Enoch Edwards.*) Will you explain what paragraph 13 in your statement means, that employers make tempting offers when men attempt by combination to obtain 8 hours ?—That is in reference to the question I have just mentioned, when the men take it into their heads if the employers cannot see their way to get eight hours voluntarily they would force it out of them, and they gave notice in 1899.

26284. What do you mean by employers making offers ?—The employers on that particular occasion, when the notice was almost up, made offers to the men which were equivalent to a very good increase in wages, and other concessions.

26285. It was not a question of wages that you struck about ?—No, but they made this offer, and made it tempting to the men.

26286. They made an offer of an increase in wages, and you accepted it ?—Some of the men accepted it.

26287. You were satisfied with your hours ?—Not generally. We did not accept it; the men accepted it in this manner. You know how the army is when the general is routed; when one large firm gave way it was circulated that they had collapsed, and they all gave way, and everybody went for making the best bargain.

26288. They employed other men and gave them more wages ?—No, employed the same men.

26289. I was right before. You struck for yourselves, but you accepted more wages and went on with the others ?—I would not put it "accepted." The men were compelled to accept more wages.

26290. You struck for shorter hours, they gave you more money instead of shorter hours, and you went on ?—That is so.

26291. Can you tell the Commission in brief why the Lancashire men work such long hours—enginemen and everybody ?—It seems to me to be custom.

26292. You could not tell us why ?—I could not tell you why Lancashire miners work exceptionally long hours. There is every encouragement given to do it, and there are places where they work long hours, and it is in consequence of not being able to get their work out. I have been a checkweighman for seven years.

26293. In answer to Mr. Abraham you said that the men begin to go down at 4.50. Is that correct ?—Yes, that is taking place at the colliery in the village where I am living to-day.

26294. They continue going down until 6 o'clock ?—They continue going down until 6 o'clock as a rule. There are men living not five minutes' walk off the pit going in at 4.30 in the morning.

26295. That is not through any pressure of the colliery owners ?—No, they are not altogether to blame for this; the miners are to blame in some respects.

26296. In those pits could they let the men down in one hour ?—For 14 years this used to be the custom, prior to the 1893 strike, a soul never went down before 5.15, and they finished at 3.40 p.m. We blew a whistle, and there was not another box of coal wound and all the men there came out at four o'clock in the afternoon. But they have extended the time at both ends until it has become almost 12 hours a day.

26297. What time do you get them all out ?—We used to have them out at four o'clock.

26298. What time is it now ?—Sometimes five, even after that, when the men are out.

26299. How do they regulate the boys under 16 ?—They have to come under the 54 hours' Rule, and they do not let them work on Saturdays. They make them play on Saturdays.

26300. Six to six is more than 10 hours ?—They are not the first down and they are the first up at night. It is human nature at that age to always go in last and come out first. The fathers are more to blame than the sons in that respect. I always find a lot of lads to let down at the last and a lot to pull up at the first.

26301. I understood you to say as an estimate that there were about 5,000 engine-winders ?—That is a rough estimate as to the number.

26302. There are twice that number of engine-winders capable of winding ?—Quite that. There is a tremendous number of engine-winders doing other classes of work—men who have gradually drifted into it.

26303. There is no scarcity of winding enginemen ?—No, there is no fear of that. If this lot were pensioned off to-morrow with a full income, and they chucked up the colliery, another staff could be sent in at once.

26304. Are the other men fully competent to wind ?—Which men do you mean ?

26305. You say there are twice the number ?—I should think twice the number in existence that have been winders and drifted to other work, such as locomotive driving or enginemen, or gone down as colliers when times are good, and other men who have been hanging about engines who have been capable for years and years gradually getting proficient; and my contention is that they could restart the whole of the collieries in a very short time with a complete set of men, if it was required.

26306. (*Mr. Ratcliffe Ellis.*) Are all these men to have certificates ?—If a man shows his qualification and he has had the necessary experience.

26307. (*Mr. Enoch Edwards.*) I was coming to that, whether in your judgment these men should all have certificates. You admit they are competent men now. By that rule of competency you would give them certificates of service to start with ?—That is so.

26308. When they gave certificates for coal mines all the first managers got certificates for service and not by examination. You would do the same thing, I suppose ?—Exactly so.

26309. After that a man should have a certificate by examination ?—That is so.

26310. Have you formed any idea why the Government Inspectors are opposed to enginemen having certificates ? That they are not colliery owners or managers ?—The only idea I can form is this: they seem to look upon the matter in the same spirit that it has been put this afternoon, that it would create a scarcity of men or a monopoly, and I believe the Government Inspectors have slightly overlooked the appearance of the thing in the

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Mr. T. Watson.

9 July, 1907.

manner we see it. They do not see it out of the same eyes. I do not think there is anything to be apprehensive about.

26311. I do not remember a single inspector assenting to the proposition that it would be a good thing to have certificates. You do not know any real reason except that they may have that in their mind?—That is so.

26312. (*Mr. Smillie.*) Do you agree that the present engine-winders generally in this country are a very capable and competent class of men, with very good characters?—Yes, that is so. I think Mr. Ellis, before the Select Committee in 1901, proved by the number of accidents reported and dealt with that they must be a most exceedingly capable class of men, and we admit that to-day.

26313. Might that not be the reason why the Inspectors of Mines express the opinion generally that there is no occasion for any further restriction with regard to certificates?—I could not say what is the opinion of the Inspectors of Mines, but we know that it is natural that the more safeguards you can put round a man to be assured that he has the ability, the more chance you have of being sure of having a man that is capable, and this is only an additional safeguard.

26314. Will you agree that the nature of the employment will naturally draw to it, or should draw to it, the most intelligent and steady class of workmen?—That is so. It has done so far. Young men as a rule, with an ambition for something above ordinary labour, have an inclination to get at the engines.

26315. There is a serious responsibility at all times on the shoulders of the winding engineman?—That is so; there is an extreme responsibility, and more than words can describe. No one understands it better than those who have to work at the engines themselves.

26316. The nature of the machinery in winding engines has changed very much during the past 25 years?—Very much, and the depth of the shaft is very different.

26317. We have come from what is known as the single link engine to the couple engine now?—That is so, and there is a much higher speed.

26318. The depths of the shafts have increased very much lately?—That is so.

26319. The amount of material wound has increased very largely?—Yes, the tonnage has increased.

26320. The size of the drums and the speed of the engines has increased?—Yes.

26321. I think we may take it that an engine-winder who 25 years ago might be winding seven hours out of 10 employed on the day shift will be winding the whole time now?—That is so, with the exception of meal times. There is another feature about the increased size of the engines. Where they used to wind three or four men up, or six, they are winding 30 or 40 men, and if there is ever a calamity through men being fatigued it will be more serious than it would have been in olden times.

26322. You are favourable to making compulsory by law any precaution which could be proved to be a preventive of overwinding in the event of anything going wrong suddenly with the engine-winders?—Everything would be a safeguard, but there is nothing absolutely complete. It would have a tendency in that direction. Anything that has a tendency to prevent sacrifice of life in consequence of people in charge falling sick or dying, is a move in the right direction, and should be appreciated.

26323. What do you mean by 5,000 engine-winders. Is that 5,000 members of existing engine-winders' associations?—We have different classes of men in our Association, which consists of winders and other classes, and we have not them scheduled according to the nature of the work they follow.

26324. Do you suggest that there are 5,000 competent engine-winders?—In our Association, the Federation of Great Britain, which I represent, it will be getting on for 14,000 or 15,000 men, but there are 5,000 engine-winders out of the total.

26325. Do you suggest that Mr. Ellis admits in a general way that those 5,000 men are particularly intelligent and steady men?—Yes, I think Mr. Ellis is prepared to recognise that they are a good class of men, and men of great responsibility, and who have exercised great caution in carrying out their duties.

(*Mr. Ratcliffe Ellis.*) I quite agree with that.

26326. (*Mr. Smillie.*) You suggest that the mines inspectors have also the same opinion?—Yes.

26327. And the mine-owners of this country?—We are prepared to give them credit for their appreciation in admitting that these are a good and cautious class of men.

26328. You would further suggest that those 5,000 engine-winders, from their experience in engine-winding and safety of the men, are in the best position to-day in this country for giving an opinion as to the conditions under which they should work?—Yes, that is so.

26329. Are they unanimous, or practically unanimous, in expressing the opinion that there should be a limitation of the hours of labour to eight hours for engine-winders?—That is the unanimous opinion, and it has been passed by our local branches, our Annual Conference of the districts, and brought before our National Federation and re-affirmed and brought on to the Trades Union Congress, and from there included in the Mines Act Amendment Bill for the last 20 years, to my knowledge, saying that it ought to be done by law.

26330. Further, they are unanimously of opinion that there should be a certificate of competency after an examination?—That is so.

26331. On those two points those men who have had the most experience of the thing, and who are admitted to be intelligent, steady, capable workmen, are unanimous?—Yes, that is so; there is a unanimity of opinion on these particular points.

26332. You are of opinion that these men are in the best position to judge?—They are.

26333. The opinion of 5,000 intelligent men should have great weight in the country and with Parliament?—Yes. Then we have the opinion of our miners' agents. I know both in Lancashire and other places that they have always felt that eight hours was quite sufficient for that particular class of men.

26334. This opinion has been come to by the engine-winders, not so much from any risk of danger which they as workmen themselves undergo, but the risk of danger to the men whose lives are in their hands?—That is so.

26335. They are particularly anxious that they should be in the best position to look after the safety of these men at all times?—Yes.

26336. Is there any real desire on the part of the engine-winders' organisation, so far as you know, in proposing certificates, to limit the number of people, or do they want to make sure that the people who are appointed are really competent?—The desire is to be sure that they are really competent, but there has never been one expression of opinion in the direction of trying to make a corner of the business and bring about a scarcity.

26337. An engine-winder for the time being at the handle of an engine is held absolutely responsible for the lowering and raising of men, and the refusal to lower and raise people under certain conditions?—That is so.

26338. It has been suggested by Mr. Ellis if you had your own way, the way the Association provides for, that there might come a time when, during a dispute, you might refuse to allow the mineowner to descend his pit?—Yes.

26339. And if you had a certificate of competency, that that might limit the number capable of taking that work. May I put it to you at the present time the managers in this country must hold a certificate of competency?—That is so.

26340. Has the mine manager at each colliery absolute power as to who shall ride up and down the shaft?—He has the control as to who shall ride up and down the shaft.

26341. He has full control, and can refuse to allow the mine owner the right to go up and down?—That is so.

26342. Supposing the mine managers of this country some fine morning made up their minds that they would go on strike generally all over the country, have they not the power of preventing the miners going, or even the mine-owner, getting up and down his own pit?—Just the same.

26343. You do not think that such a thing is likely?—No. May I say this with regard to that: it is within the province of the mine managers to combine and agree not to manage the pits until they get certain concessions, which you might consider exaggerated, and they might make it that the pits could not be worked in consequence of having no certificated managers. That is just as probable as the enginemen combining under certain conditions and bringing the pits to a standstill.

26344. There is a limited number of mine managers?—Yes.

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26345. Probably not anything like 5,000, or half that number ?—There are a good few now ; I think they are increasing. I think there are many mine managers, enough to start the mines over again now.

26346. I suppose no owner would be entitled to tell the manager that he must take some young man and learn him the duties of mine manager ?—Their practice is to claim some voice as to who they learn, and some go so far as to want a premium from the people they are instructing. It is common for a man to pay a premium on entering an engineer's office, even in surveying or mining engineering.

26347. Supposing it were ultimately considered a wise course for the Government to pass an eight-hours' day for engine-winders, it would not seriously interfere with the coal industry in this country ?—I do not think it would. So far as we are looking forward to it, that is a kind of a bogey. It would be a step in the direction of giving us assurance that there was one independent authority to say in addition to the management that this individual is capable of doing this work.

26348. I am dealing with the shortening of the hours of labour now. Eighty-five per cent. of the engine-winders in this country to-day are working what is called the 12-hour shift, the 10 hours and the 14 hours ?—I do not think that there is quite 85 per cent. ; put it at 70 per cent. *Mr. T. Watson.* 9 July, 1907.

26349. Supposing the Government passed a measure making an eight-hours' day the maximum for engine-winders, it would not seriously interfere with the coal trade of the country—I mean by the shortening of the hours ?—It could not, because at the most, assuming that the whole country was working twelve hours at this minute, and they converted all into eight, it would only want a third more enginemen to fill the vacancies, and we know that we have double the enginemen.

26350. The cost on the output would be infinitesimal ?—You have two enginemen at collieries each giving 1,200 or 1,400 tons a day, and the extra cost spread over that 1,200 or 1,400 tons would mean a day's wage for another engineman.

26351. You and the organised engine-winders are of opinion that it would or might limit the risk to the workmen working underground ?—That is so ; it would limit the risk, and everyone would feel in a better and more reliable condition, and I believe that the miners would feel more confident than they do now when they know that a man has been on duty for 14 hours.

THIRTY-EIGHTH DAY.

Wednesday, 10th July, 1907.

PRESENT :

Lord MONKSWELL (*Chairman*).

Sir LINDSAY WOOD, Bart.
WM. ABRAHAM, Esq., M.P. (Rhondda).
F. L. DAVIS, Esq.
ENOCH EDWARDS, Esq., M.P.
THOMAS RATCLIFFE ELLIS, Esq.
JOHN SCOTT HALDANE, Esq., F.R.S.
ROBERT SMILLIE, Esq.
S. W. HARRIS, Esq. (*Secretary*).

Mr. DANIEL ALEXANDER WILBERFORCE ROBERTSON, called and examined.

STATEMENT OF WITNESS.

26352. (1) *Examination System.*—I have been appointed by the New South Wales Government to give evidence before the Commission on their behalf on the disparity of conditions which exists between Great Britain and that State in respect to the granting and recognition of certificates of competency as colliery managers. Some correspondence passed between the Governments of the two countries in 1903, and a copy of this was handed in by Mr. Delevingne (see Question 244).

(2) I am also prepared, if the Commission wish, to answer any questions on the following notes which I have made on other matters within the Commission's terms of reference :—

Dust Question.—Explosibility of coal dust either by shot-firing or local gas explosion is proved beyond doubt. Danger area may, therefore, be indefinitely extended beyond the vicinity of initiation by the presence of coal dust.

I approve of watering in the vicinity of a shot, but having regard to the disastrous effect on roof, sides and floor of many mines and the doubtful efficiency of the most practical method, *compulsory* watering is not recommended.

It is useless to water on a main road while other communications are dusty.

In deep, dry mines the temperature is so high that it is not feasible to lay dust effectively. There is always sufficient dust on timber and crevices of coal which on concussion would carry forward an explosion. Often sufficient from face, tubs, and from screens to carry on explosion. Dust taking part in explosion is only the finest and impalpable.

Analyses of dust at the Kembla explosion thought to be fine ; on analysis found to be identical with coal *in situ*. Therefore, dust actually a factor must have been finer, such as carried in the air of best-watered mines. Explosion at Kembla jumped long distances of wet and damp roads and died out in the dustiest parts. Same at Fernie, Canada. Zones of watering, therefore, must be much longer than generally supposed to be effective. *Mr. D. A. W. Robertson.* 10 July, 1907.

Accidents on Haulage Roads.—Better provision should be made in the way of travelling roads to obviate the necessity for workmen walking on steep inclines or haulage roads, particularly where main and tail system in use and in proximity to dangerous machinery.

Standard Method of Testing for Firedamp.—All ordinary inspections by officials should be made by lamps burning mineral oil, which will readily indicate 1 per cent., while colza oil alone will not show clearly less than 3 per cent. Unless where mineral oil should be inadmissible on account of dust, the miner's lamp also should consume mineral oil. It would then be possible to establish a standard height of cap or percentage of gas permissible in the working face, travelling roads and other parts of the mine, the importance of which cannot be over-estimated.

Safety Lamps.—Should be made compulsory wherever explosive gas is known to be given off. Accidents involving loss of life are frequently occurring in mines giving off a little gas and thought to be safe mines, where the contingent dangers are either ignored or not sufficiently appreciated. Neither owners, managers or workmen should be permitted to perpetuate a system fraught with danger to life and property and a reflection upon mining men of the present day.

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Mr. D. A. W. Robertson.

10 July, 1907

Safety lamps should also, in view of disastrous fires, involving loss of life, be made compulsory in mines (coal mines, at all events), not naturally wet or damp.

26353. (*Chairman.*) I understand that you are Chairman of the Board for Appointing Examiners in New South Wales. How long have you held that position ?—About one year.

26354. What has been your previous experience or your previous occupation ?—I have had 36 years' experience of mining and the management of mines.

26355. Thirty-six years ?—About 30 in the management of mines.

26356. How long have you held a first-class manager's certificate ?—About 30 years.

26357. You are a member of the Metropolitan Coal Company, Limited, of Sydney ?—I am general manager.

26358. You have been appointed by the New South Wales Government to give evidence before the Commission on their behalf on the disparity of conditions which exists between Great Britain and that State in respect to the granting and recognition of certificates of competency as colliery managers ?—Yes.

26359. You state here in your *précis* what the kind of examination is and what the subjects are for which people examine for first-class certificates in Sydney. We should like to know how you consider your examinations compare with ours ?—I consider that our examinations are very much on a par with the examinations in the British mining districts.

26360. In the various districts in England there is a very considerable disparity in the examinations. Some districts are said to give first-class certificates on much less knowledge than others ?—I have heard it said so.

26361. Do you consider, taking them all round, that your examinations are more satisfactory than ours for first-class certificates ?—I should not be inclined to say that they are more satisfactory. I say that they are at least as satisfactory and as severe.

26362. What are the particular points to which you desire to call attention with regard to these examinations ? —Our case is very concisely put in the papers before you, and, really, I have very little to add to that.

26363-4. To the papers that are now before us ?—Yes, but I am here to answer any questions you may ask me.

26365. This letter of the 10th December, 1903, signed by E. F. Pittman, Under-Secretary of the Chief Secretary's Department, Sydney, states that their Coal Mines Regulation Act of 1902 is almost a copy of the Imperial Act, 1887, and that the qualifications required to enable mining men to obtain certificates of competency or of service are in effect practically the same as those demanded in Great Britain ?—Quite so. I do not know whether you have any of our Blue-books before you I have the last one here in which the questions put to the candidates are given, and that will give you a fair idea of the nature of the examination.

26366. Is it your point that these Colonial examinations may be taken in England as being equivalent to our examinations ?—Yes.

26367. That is what you would like to suggest to us ?—Yes.

26368. That anybody who had a first-class certificate in Sydney ought to be treated as if he had a first-class certificate here ?—Quite so ; we maintain that the opportunities for gaining experience are as varied as you will find in the British coalfields, and the examinations are quite as stiff.

26369. I understood you to suggest to us, supposing a man begins his mining experience either in England or Sydney and goes from England to Sydney or Sydney to England, that the experience in England should be taken into account or is taken into account in Sydney, and that similarly the experience he has had in Sydney should be taken into account when he comes to England ?—Yes.

26370. What happens now supposing a man goes to you from England with a certificate that he has worked underground for two years and had practical experience in underground mining for two years ; would you take those two years towards the five years' experience you require for a certificate ?—Yes.

26371. You do that now ; that is your practice ?—Yes, we simply desire to know whether the man has had the necessary experience gained anywhere. In fact we look upon a candidate who has gained his experience in various countries as probably rather a better man.

26372. You say it is not only with an English certificate but also with a Belgian certificate or a German certificate ? —That would be at the discretion entirely of the examiners.

26373. There is no rule laid down by Act of Parliament in Sydney as to what experience a man must have for his five years' experience except that he must have five years' experience in mining ?—Yes.

26374. Supposing he has not had it all in Sydney. If he says, "I have had two years' experience in England, Belgium, or Germany," he must produce evidence to show that he has had that experience ?—Yes.

26375. What evidence do you require ?—He must have documentary evidence from his employers to show that he has had experience, and then it is left entirely to the discretion of the examiners whether they will accept that, because it necessarily follows that experience in one of our States might not be of the same value as experience in another. It depends altogether on the extent to which coal mining is carried on.

26376. Your Act in Sydney has the same words, but you interpret them differently ?—I have reason to think that you interpret your Act in the same way if I am not mistaken ; some of our young men have gone over with the greater part of their experience in New South Wales and it has been accepted here.

26377. (*Mr. Ratcliffe Ellis.*) I think that is not general at all ?—But still it has been done.

26378. (*Chairman.*) Then with regard to the experience in mines it must be for at least five years. That would leave the examiners no option at all if the experience has to be in New South Wales. If the whole experience was in New South Wales, and a man produced evidence that he had had practical experience for five years in New South Wales, then the examiners would be bound to say, "You are qualified to sit for this examination on the ground of experience." They could not refuse him, but supposing he produces a certificate of experience from elsewhere and asks the examiners to accept that experience instead of the experience in Sydney, the examiners have a right to say, "We will do nothing of the kind ; we have an option " ?—Experience gained in your coalfields would be accepted without question, but you must bear in mind that we have some candidates occasionally from other States of the Commonwealth, where coal mining is only carried on to a very limited extent, and it is necessary that they should have that discretionary power to refuse.

26379. Does each Board of Examiners have that discretionary power ?—There is only one Board.

26380. They have absolute discretionary power to say whether a man must produce what they consider sufficient evidence of practical experience for five years ?—Quite so.

26381. (*Mr. Ratcliffe Ellis.*) Supposing a man has had five years' experience in a mine in New South Wales, there is no discretion in the Board of Examiners as to qualification. That qualifies him to sit for the examination ?—Yes.

26382. If he has had five years' practical experience elsewhere than New South Wales, the examiners may please themselves whether they allow him to sit or not ?—Yes.

26383. (*Chairman.*) The Board of Examiners of which you are Chairman would always accept evidence of practical experience gained in an English mine ?—There are two questions involved in that. We do not only ask that the experience gained in New South Wales should be accepted here, but we ask that the certificates granted by the New South Wales Board of Examiners——.

26384. I was not on the point of certificates ; I was on the point of practical experience enabling a man to sit for examinations ; I want to deal with that question first before I go on to the other. Dealing with the question of the amount of mining experience that will entitle a man in New South Wales to sit for the first-class certificate, you say in practice that you would always recognise experience in an English coal mine ?—That is so.

26385. You have never refused a man who has produced evidence that he has had practical experience for so many years in an English coal mine. There are parts of the Commonwealth which you feel it necessary to exclude ? —Yes, because coal mining is carried on to a very limited extent ; in fact in some not at all.

26386. And foreign countries ?—Yes.

26387. Experience of underground work in some foreign countries you would take, and in others you would not take ?—As a matter of fact I do not know that we have had any from foreign countries.

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26388. You suggest that it should be reciprocal and in England—I am only now dealing with the experience that would enable a man to sit for examinations—we ought to accept practical experience in New South Wales as being equal to that gained in the United Kingdom ?—Yes.

26389. If the Board of Sydney is willing to vouch that a man has had practical experience for so many years in New South Wales you think that it should be accepted in England ?—Yes.

26390. The ground for saying that is because you think a man may gain as varied a practical experience in New South Wales as anywhere else ?—Yes.

26391. That is as regards experience. Then you go further and say that the New South Wales certificate should be recognised in England just as our first-class certificate is accepted in that State ?—Yes.

26392. If a man comes from Sydney with a first-class certificate he ought to be able to take a manager's place in England ?—Yes.

26393. Your ground for saying that is you consider your examinations are quite as stiff as the average examinations in England ?—Yes, and the experience to be gained is quite as varied. Let there be no misapprehension; this is only asked on behalf of the State of New South Wales. There must not be any misapprehension in the matter that it is on behalf of the Commonwealth. It is only New South Wales where coal mining is carried on to any great extent. I am not here on behalf of Victoria or Queensland.

26394. You have not had sufficient experience in other mines in Australia to make a suggestion as to whether a certificate from Victoria ought or ought not to be accepted? —There are very few coal mines in the other States, and I should say it was impossible that a candidate could possibly have the necessary experience if he had worked entirely in Victoria or Queensland.

26395. You are prepared to put in some examination papers to show the nature of the examinations in Sydney ? —I put in the Annual Report of the Department of Mines for New South Wales for 1906.

26396. Do you wish to make any further observations other than those which are contained in these official documents with regard to experience and examination for first and second-class certificates ?—No, I do not know that I can. I only wish to say that our coal mines there on the whole, I think, compare favourably with the British coal mines. They are very well equipped; some of them are very deep, and there are a great variety of conditions. Some of them are very gassy, and I consider that the management of our mines, to say the least, will compare favourably with British coal mines.

26397. You propose to give us your views with regard to the dust question and watering and so on. There is one statement you make which I should like to hear your explanation of. You say the explosion at Kembla jumped long distances of wet and damp roads and died out in the dustiest parts, and that the same thing happened at Fernie in Canada. That is contrary to the opinions of witnesses who have appeared before us. What do you mean by "long distances of wet and damp roads" ? —The explosion at Kembla started in a dusty portion of the mine and it travelled out towards the tunnel mouth, and the last part of it—that is at the tunnel mouth there were at least 200 or 300 yards of road damp, one might say almost wet.

26398. It went right through at least 200 yards of damp road ?—Yes, it went right through and ignited. Besides destroying the engine-house it ignited some woodwork outside. It also died out in the dustiest portion.

26399. Perhaps it had expended nearly all its energy before it got to the very dusty portion, and consequently there was not sufficient wind to raise the dust?—It died out in the dustiest portion within about perhaps 300 yards of the point of origin, and it went out in the wettest portion against pretty nearly a mile of roadway.

26400. I do not quite follow what you mean.—It died out in the dustiest portion within about 300 yards or so of the point of origin of explosion, and it travelled out against a road wet and dusty in patches and finally 200 or 300 yards of wet road, probably three quarters of a mile from where it originated.

26401. You mean that it went in two directions ?—It went in several directions.

26402. In one direction it died out after 300 yards in a dusty part after having traversed 200 yards of wet road ? —No, I am afraid I have not made myself clear; the explosion in one direction died out in dust within, say, 300 yards of the point where it originated.

26403. What did it pass through ?—Dust.

26404. Passed through dust for 300 yards and died out in the dusty part ?—In the dusty part.

26405. It went the whole way through a dusty part of the mine and died out of itself within 300 yards, although the whole of the road it went through was dusty ?—The 300 yards. Then in the other direction it went out towards the tunnel mouth for a distance of probably three quarters of a mile, and that road in parts was wet, with patches of dust on the tunnel mouth end; that is, the furthest point from the point where the explosion started, and was quite three-quarters of a mile, so that the explosion actually died out in dust within quite close proximity of where it originated.

26406. Was the explosion a very strong explosion in that direction ?—It was violent in the wettest direction.

26407. In the direction in which it died out in 300 yards did it begin by being violent ?—Yes.

26408. It died out very suddenly ?—I daresay within 300 yards; I speak approximately, but it was something like that.

26409. (*Sir Lindsay Wood.*) Where it died out in 300 yards was the current going in the same direction as the explosion or against it ?—It was going with the explosion.

26410. In the three quarters of a mile was it going against the current ?—Yes.

26411. (*Mr. Ratcliffe Ellis.*) What sort of a road was it—a haulage road ?—A haulage road.

26412. Horses ?—Endless rope.

26413. What sort of dust was it ?—The mine in the ordinary sense would not be considered very dusty.

26414. Shale dust or coal dust ?—Coal dust. It was rather coarse dust.

26415. (*Chairman.*) Was it finer in the direction it went further ?—No, I should say not.

26416. What about this Canadian explosion ?—That I only know of by reading the various accounts of the explosion.

26417. As regards the Kembla explosion, that was a colliery you went down yourself ?—I was down there within one hour after the explosion, and I subsequently spent some time as a Royal Commissioner investigating the cause of the explosion.

26418. You can put in a Report you made on that explosion ?—Yes.

26419. You want to say something to the Commission about accidents on haulage roads. You think that better provision should be made in the way of travelling roads to obviate the necessity for workmen walking on steep inclines or haulage roads, particularly where the main and tail system is in use and in proximity of dangerous machinery. What is your suggestion with regard to the prevention of accidents ? What do you do in Sydney ?—My remarks apply everywhere I think. There is not sufficient provision made in many cases for the safety of workmen. I think travelling roads should be provided in dangerous positions and steep inclines where the main and tail rope system is in operation.

26420. What is the main and tail system ?—The essential difference between the main and tail and the endless rope is that the speed is very high in the main and tail, anything from 10 to 15 miles an hour, but with endless rope it is not very often more than 2 miles an hour.

26421. What do you do in Sydney with regard to making haulage roads safe ?—Generally speaking separate travelling roads are provided. In my own colliery we have many miles, in some cases we have duplicate travelling roads so that horses might go on one and men on the other.

26422. Where the men are obliged to go alone on the haulage roads, do you consider it necessary to have a gangway on one side sufficient for a man to walk on to get out of the way of the trucks ?—It is not in all cases so. In certain dangerous positions for instance apparently walking along a haulage road you come to a place where there is machinery overhead and you have to step down to 4 ft. 6 or 5 ft. 6, and with the racket of the machinery you cannot hear the trucks coming forward, and accidents undoubtedly may and do occur in that way.

26423. If you had a gangway you could always walk on the gangway at the side ?—That would not be in all cases

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practicable. The roof might be so bad that it would be practically impossible to maintain a road wide enough to permit that. You might have a separate travelling road a few yards off.

26424. Have you anything further to say about accidents on haulage roads?—No, only my general opinion that greater provision should be made for the protection of workmen travelling in dangerous conditions. There are some haulage roads where the endless rope is in operation moving at a very slow pace, 2 miles an hour, which is under the rate a man can walk himself. There is not much need for it there.

26425. Your experience of mines I understand has been got not only in New South Wales, but you have been over a large number of mines in the United Kingdom?—I have been 20 years in New South Wales, and for nearly 20 years before then I had experience in the British coal mines.

26426. (*Mr. Ratcliffe Ellis.*) I see you say that it would be possible to establish a standard height of cap or percentage of gas permissible in the working face, travelling roads, and other parts of the mine.

(*Chairman.*) What is your explanation of that paragraph? Mr. Ellis wants to know what you propose to do under that suggestion of yours?

(*Witness.*) The examinations for firedamp are made at the face by lamps burning different oils. You cannot, as you have heard before in this Commission, detect less than 3 per cent. if you burn Colza oil. I maintain the examination should be made by lamps burning an oil which will show percentages at least down to 1 per cent., and then you will have a uniformity in the results, but the reports at present are very confusing, because it is quite clear that one man is examining for gas with an oil that will show 1 per cent., and another man is examining with an oil that will only show 3 per cent. Of course, you will have very different results.

26427. (*Mr. Ratcliffe Ellis.*) You say in your second paragraph with reference to the standard that it would then be possible to establish a standard height of cap or percentage of gas permissible in the working face, travelling roads, and other parts of the mine. Do you consider that there should be some percentage of gas that might be permissible?—You must, you cannot avoid it. You cannot have mines absolutely free from gas. At present there is such a diversity of opinion upon that point that it is very desirable that some standard definition of dangerous percentages of gas should be arrived at.

26428. When you have got your standard, what then?—If you exceed the standard the men are not to be permitted to work.

26429. Is it up to a certain standard that they should be permitted to work?—Yes; it is obvious no matter how perfect the ventilation may be, if a mine gives off gas freely you must have some percentage of gas in the air.

26430. (*Sir Lindsay Wood.*) I think the point is this, that the percentage of gas now permissible is that when it shows a cap?—Yes.

26431. If it shows a cap it is not permissible to work, but the showing of a cap is a debateable point. Then you say some oils show 1 per cent. and some show 3 per cent., and you want to have some standard system introduced?—I do not mean where a lamp shows the presence of 1 per cent. of gas that working should not be permitted. It is the only means of indicating what percentage is in the gas. Then comes another question: what percentage would you allow? You would have to allow more than 1 per cent. That is obvious.

26432. The crucial point is the showing of a cap?—Yes.

26433. That, you say, is an uncertain quantity?—That is so. We know Colza oil will not show less than 3 per cent; therefore if a lamp burning Colza oil shows a cap it must be more than 3 per cent., and more than 3 per cent. would not be permissible.

26434. (*Chairman.*) I do not understand how you gauge the difference between 1 per cent. and 3 per cent. The mineral oil lamp will show a cap of 1 per cent. Do you go by the height of the cap?—Yes.

26435. At 2 per cent. the cap would be so much higher? Yes.

26436. You measure the cap?—Yes.

26437. The fireman, or whoever's business it was, would measure the cap on the lamp and say, "This is a safe cap: it only shows 1½ per cent."?—Yes.

26438. (*Sir Lindsay Wood.*) On the question of the explosion dying out within 300 yards, do you attribute that to the fact that the explosion was going in the same direction as the air?—That may have been a factor, but I have not come to any conclusion on the subject. I merely record it as a fact.

26439. The effect would be that the explosion itself was depriving the current of the air necessary to feed the explosion?—No doubt.

26440. It was burning the air, and preventing the oxygen getting to feed it?—I might explain that the mine was ventilated by more than one inlet, and in the one direction in which the explosion died out through a pair of doors it met a fresh current of air; that is to say, it followed the air current from where it originated for so many hundred yards, and then blew through two doors and met a fresh air current. It would be an intake in that case really against the explosion.

26441. It is very difficult to judge?—Yes.

26442. Are the mines in New South Wales very similar in extent to the English mines, so that the experience of a man would be somewhat similar to what it is in England?—Yes. We have some very extensive mines, and I think there is at least one, the colliery with which I am connected, where, in so far as the gas is concerned, I have not met anything so dangerous in any British coalfield. We have very large ventilation, 400,000 cubic feet a minute, and a good deal of gas in that.

26443. Does it extend over a large area?—The workings cover an area probably of 2,000 acres, and that is in the course of about 18 years' work, and there are other mines even more extensive.

26444. A large proportion of the mines are worked by drifts?—They are mostly worked by drifts. The last few years there have been a number of shafts sunk. The Sydney Harbour Colliery is the deepest, nearly 3,000 ft. That is exceptional. The next is the colliery with which I am connected, working at a depth of about 1,500 ft., but then again the shaft is only 1,100 ft. It is sunk in a deep gorge.

26445. What would be something like an average depth? Does it run about 300 ft.?—More than that. The average depth would be considerably over that. A large number of mines are 500 odd ft., 600 ft., and 700 ft., and from that on to 3,000 ft. For the most part they are now worked by safety lamps.

26446. (*Mr. Enoch Edwards.*) This explosion to which you referred, I understood you to say, was along a dusty road. The explosion spent itself and was exhausted in 300 yards?—About 300 yards.

26447. It was over a wet roadway. How wet was it? Was it naturally damp or was it by being watered?—The roadway was damp, but dusty in parts.

26448. There must be some material to feed the explosion?—No doubt that accounted for it up to a certain point, but it ended at 300 yards or so in a road that was distinctly damp, and fired the engine houses outside.

26449. What do you think is the explanation that the dusty road did not feed the explosion and carry it on?—I cannot say. I merely state the fact. I believe that the experience at Fernie, in Canada, was similar; but I do not know about that from personal observation.

26450. This mine you refer to you know all about?—Yes.

26451. Was it a gas explosion?—We think it was a gas explosion originally, but what ignited the gas is a mystery, because there was no light.

26452. No blasting?—No question of a shot involved. There was no light within 200 or 300 yards.

26453. (*Chairman.*) And no man?—Nobody.

26454. (*Mr. Enoch Edwards.*) Do you use electricity underground?—At that time?

26455. Yes?—Yes, they had electricity.

26456. Electric coal cutters?—Not at that time.

26457. You have no doubt that it did not arise from that?—There is absolutely no question. It was not an explosion from shot-firing, and it must have been ignited, but how it was ignited is a mystery. It was a naked light mine, I may say.

26458. Is not the other portion rather a mystery, that it would travel so far along the damp road and does not travel or feed on a dusty road?—It is a curious thing, but that is supported, I say, by the experience at Fernie.

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26459. You have not been able to solve that riddle ?—No, it is a mystery to this day.

26460. Was the dust of such a nature that it would feed an explosion ?—I may say it was not, in the ordinary acceptation of the term, a dusty mine, but apparently, of course, it did.

26461. (*Dr. Haldane.*) What made the road wet ?—It was naturally wet. They had watered, but I am afraid they did not water very systematically.

26462. Was the dampness of the road due to watering ?—Artificial watering ?

26463. Yes ?—No, not in my opinion.

26464. It was natural damp ?—The Company claimed that they watered the roads, but I do not know that we were very well satisfied on that point. It was watered naturally, in the mines, from the surface.

26465. (*Mr. Enoch Edwards.*) Some portion of the road is naturally damp, I understood you to say ?—Yes.

26466. The roadway of 300 yards which the explosion travelled was dusty. It ceased to travel beyond that point. You have no explanation of why it did ?—No.

26467. You make a suggestion here about the percentage of gas in a place. You suggest with a certain kind of oil that is used you will be able to ascertain a fixed standard of gas ?—We cannot at present, because you burn different oils.

26468. Do you mean that if you could get a lamp that will fix you a standard of 3 per cent., that 3 per cent. prevents you working in it ?—I do not mean to say that at all. They do at present, no doubt, because there are a lot of miners working using colza oil, and they are permitted to work although there may be gas almost sufficient to show 3 per cent. It must be quite clear if the cap is distinct on a colza lamp that it is 3 per cent.

26469. Is not the fireman capable of detecting this gas when going his rounds ?—If the oil will not detect under 3 per cent., he cannot. That is the limit of his powers.

26470. Do you suggest in all fiery mines in this country that the fireman going round with a lamp when there is gas cannot detect it ?—He cannot if he burns colza oil. That is obvious.

26471. It is suggested that 3 per cent. of gas in a dusty mine is sufficient to cause an explosion ?—Certainly.

26472. So that do you seriously suggest that in all the pits in this country, when the fireman is going round and there is a condition of things of that sort, with men working, that he cannot detect it ?—Very possibly. I think it is very likely.

26473. You think so ?—I am sure of it. If they burn colza oil they cannot possibly detect under 3 per cent.

26474. (*Dr. Haldane.*) Have you made any analysis of the air to show that fact, because it is a most disturbing statement. Do you know any analysis of the air to support that statement ?—I make tests along with the Government inspectors with lamps burning colza oil, and also mineral oil, and undoubtedly, comparing with the test made by the hydrogen lamp, the colza oil will not show under 3 per cent.

26475. Are there reliable analyses to show that ? It is a statement that is most extraordinary ?—Is it ? I am not aware that it is extraordinary. I have often heard it before.

26476. (*Mr. Enoch Edwards.*) It is the first time it has been suggested here to us ?—That colza oil will not show less than 3 per cent. ?

26477. It is the first time it has been suggested in the way you put it, that a fireman may go round with his lamp examining a pit which is in a highly dangerous condition, there being 3 per cent. of gas in the place, and would not be able to detect it.

26478. (*Dr. Haldane.*) How is such a test made ? I have done tests with far less than that, and the cap was as distinct as possible ?—Burning colza oil ?

26479. Yes ?—I do not know.

26480. Did they pull down the flame when testing ?—Certainly. If you burn pure colza oil you cannot see under 3 per cent.

26481. I should say you could easily see a good deal under 2 per cent. ?—That is a matter of opinion, I do not think so. I am sure I have often heard the statement made before.

26482. These statements are made very loosely. There is no analysis of the samples ?—I can only say I have made the experiments with the Government inspectors, and that is the opinion we have formed.

26483. You have only checked the percentage with a hydrogen lamp ?—Yes.

26484. You might over-estimate the percentage with a hydrogen lamp ?—Not very much.

(*Dr. Haldane.*) I think it is very difficult to determine.

26485. (*Mr. Enoch Edwards.*) When you say it has been suggested, do you mean you have heard it suggested in England ?—Certainly. I have often heard it. I believe you will find it in the text-books, too.

26486. I am right in stating that it is suggested if there is 3 per cent. of gas in a dusty mine you have all the elements of an explosion ?—Certainly.

26487. So that you may have firemen passing places as safe every morning ?—Quite so.

26488. We have been living in rather a fool's paradise here ?—I daresay you have.

26489. Of all the inspectors and experts who have been here, none have told the Commission that we have such a condition of things which we approve as safe. The present law is very clear that we require ventilation to dilute this gas and render it harmless ?—What is "harmless" ; I want to have the standard established.

26490. It is less than 3 per cent., because 3 per cent. could not be said to be harmless ?—Why do they establish 3 per cent. ? Is it not because that is the lowest percentage that can be detected by the lamp that was in use for a number of years ?

26491. That is how you put it, I understand ?—Yes.

26492. With regard to your reference to travelling roads, do I understand in New South Wales that you have separate travelling roads in your mines ?—Very often. I do not say that we are perfect in that respect, but I say that there are conditions in many mines dangerous, in my opinion, and I do think that better provision ought to be made under those circumstances.

26493. You have, perhaps, heard that several witnesses here have suggested making a by-road alongside the tramway, keeping a sufficient width always for men to travel to and fro ?—That might not be always possible with a bad roof.

26494. I understood you to suggest as an alternative that you thought the safer way was to drive a separate road ?—Yes, and I think it can be done in most cases. I do not see why in longwall working a separate travelling road could not be generally adopted. I see no reason why it should not.

26495. In all cases where you have main haulage roads there should be a separate travelling road ?—Yes. I do not say in all. There may be some of an exceptional character, where the expense would be too great, and, perhaps, which would warrant exemption.

26496. Have you had much experience of watering roads in mines ?—Yes—well, I cannot say that I have had much experience, as, probably, the management in this country, but it has been done very extensively. I have seen a very well-watered mine.

26497. Have you seen any in this country watered ?—Yes.

26498. Recently ?—Yes.

26499. (*Mr. Ratcliffe Ellis.*) With reference to your examinations, you have an alternative to the five years' practical experience in a mine, and it is that a period of three years' apprenticeship to a mining engineer may be substituted by a candidate for a first-class certificate as an alternative for an equivalent period of regular employment in a mine under the Act, if the apprentice has, in the discharge of his duties, to go down mines and obtain practical experience therein ?—Yes.

26500. Would you take surveying as sufficient practical experience ? You do not say the practical experience in the management, but you say an apprentice to a mining engineer, if he has to go down mines and obtain practical experience therein. Would you consider surveying sufficient ?—Not surveying alone. That would be a matter for the examiners to determine, whether the nature of his duties while in the mine afforded an opportunity for him to gain experience. A man confined entirely to surveying I do not consider would be sufficiently qualified.

26501. Is it looked into closely to see what duties he has to perform in one of those alternative qualifications ?—

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The examiners satisfy themselves. The surveyor's duties very often are more than surveying: they are general; probably an assistant to the manager, and so forth.

26502. That is enquired into ?—Yes.

26503. Not merely that he has to go down mines to obtain practical experience, but the nature of the experience he gains is enquired into ?—Yes.

26504. Can you obtain a diploma from any certified mining college in your country ?—Yes, we have technical colleges. There is the university mining class and technical colleges in three main centres, also local technical classes.

26505. You do not accept as a substitute for part of the experience in a mine a diploma from one of these colleges ?—No, but I think they should. I think so myself, but the Board, so far, have not come to my way of thinking.

26506. That has been adopted in England ?—Yes.

26507. You think that would be desirable ?—I think it is highly desirable, considering that a scientific education is required now from employers. I think it is ridiculous to think that the time a man spends in acquiring that scientific education should not count.

26508. When you get a certificate from England as to a man's experience who is going to submit himself for examination in New South Wales, what is the form of the certificate ?—A certificate from his employers as to his duties, and so forth ; nothing else.

26509. Does it say what duties he has performed ?—Yes. The examiners would satisfy themselves that the candidate has had the necessary practical experience.

26510. They can only satisfy themselves upon the certificate. They do not send to this country for evidence ?—No.

26511. Have you a form of the certificate sent ?—No, they are the usual documents.

26512. Could you say what is put upon the certificate ? You have seen many of them, no doubt ?—They do not come before me, although I am Chairman ; they come before the examiners.

26513. You do not know what is said on it ?—What is usually said on testimonials as to character and experience.

26514. The examiners do not take any trouble to ascertain what is the character and the experience a candidate would have in the mines. It is in the letter that comes to them ?—They satisfy themselves also by oral examination of the candidate.

26515. I am talking about the qualification to sit; as to his ability to pass, that is another matter ?—I mean before they allow him to sit they will take these written testimonials from the employers and ask the candidate questions.

26516. It is upon what he says as well as the written letters that they accept his experience ?—Yes.

26517. You have an ambulance examination for the second-class candidates ?—Yes.

26518. But not for the first ?—I think so.

26519. It does not seem to be here ?—If you look at the rules for the conduct of examinations I think you will find it there.

26520. I beg your pardon. I see these remarks apply to both classes of candidates ?—Yes.

26521. In your oral examination the candidate must satisfy the examiner that he has a thorough practical knowledge of mining ?—Yes.

26522. Electricity does not seem to be put in here ?—Yes, this last year or two, but I do not know whether I can find it. That has been brought up before the Board, and I think notice was given that it should be a subject for examination. I see from the Blue Book that it is one of the subjects—machinery, boilers, pumps, electrical appliances, etc.

26523. You may have added it since this was put in. With reference to machinery, does that include coal cutting ? Yes, we have a lot of coal cutting in Australia.

26524. That is as to the qualification to sit. With reference to the examination, have you one Board ?—Yes.

26525. One examination only ?—No, there are two examinations—one generally held at Newcastle and the other at Sydney.

26526. Different examiners ?—No, the same examiners.

26527. How frequently are these held ?—Twice a year.

26528. The same examiners ?—Yes.

26529. At each place ?—No, only one in Newcastle and one in Sydney.

26530. So that there are two in the year, but by the same examiners ?—Yes.

26531. (*Dr. Haldane.*) The whole of the coal production is in New South Wales ?—Yes. There is some in New Zealand.

26532. There is some in New Zealand ?—Yes, but it is practically all in New South Wales.

26533. (*Mr. Ratcliffe Ellis.*) Have you candidates from any other places except New South Wales ?—We have had one from Queensland, who was rejected.

26534. You allow them to come and sit ?—Provided they satisfy the examiners.

26535. You do not exclude them from any other place ?—No.

26536. When a man comes with an English certificate is that re-certified in any way by your mining authorities ?—It has to be produced and registered.

26537. Produced to the mining authorities in New South Wales, and it is registered ?—Yes.

26538. Is there any communication with the Home Government as to whether this is a valid certificate or not ?—The production of the certificate is sufficient.

26539. It might have been cancelled here ?—It may be. It is a very unlikely contingency.

26540. You have no communcation with the Home Government ?—No.

26541. Is not that desirable ?—I daresay it is, but I should call it an extreme precautionary measure.

26542. If your certificates were recognised in England you think they should also be registered here by the Home Office ?—Yes ; I should think it very improbable that any candidate would produce a cancelled certificate.

26543. It might perhaps be safer if a certificated manager, who has a certificate in New South Wales, is going to use it in England, or one who has it in England is going to use it in New South Wales should have it visaed in some way before he takes it away from here or there ?—I quite concur.

26544. (*Mr. Haldane.*) Would it not do to notify the Government there of any cancellation ?—That would be better.

26545. That would save a lot of trouble ?—Yes.

26546. (*Mr. Ratcliffe Ellis.*) With reference to gas in New South Wales, is it your experience that men are working in gas to the extent that you have mentioned —3 per cent. ?—I do not think so, except in one colliery. There is not sufficient gas given off to bring about a percentage of 3 per cent. There is only one, and in that one they are examined with mineral oil.

26547. Have you the same regulation in New South Wales as we have in No. 1 General Rule ?—Yes, only there is an additional proviso that the adequate ventilation is defined as so many cubic feet per minute, and a very dangerous thing, in my opinion.

26548. In your view as a manager, is that a safe state of things ? You say in New South Wales you know men are working in gas to the extent of 3 per cent. ?—I did not say so. I said the contrary. I said only in one mine was gas given off in sufficient quantities to give 3 per cent. in the air.

26549. What is the condition of that mine ?—In that case the examinations are made with mineral oil lamps, and the men would not be permitted to work in 3 per cent., or anything like it. If the examinations were made by lamps burning colza oil the chances are they might be working in 3 per cent. and be quite unaware of it.

26550. (*Dr. Haldane.*) Is it pure colza oil that is commonly burnt in miners' lamps in New South Wales, or a mixture of colza and paraffin ?—Generally a little kerosene mixed with it.

26551. Just as there is in England ?—That is not pure colza. Some do mix a little kerosene, and that makes a material difference, but others are using pure colza, and if you use pure colza you cannot detect it. You asked me about colza oils. If you say a mixture of colza with something else it is a very different matter.

26552. (*Mr. F. L. Davis.*) What is the output of the colliery that you are connected with ?—330,000 tons per annum.

26553. Is that one of the largest, or the largest ?—No, there are some with larger outputs than that.

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26554. What would be the biggest output ?—I do not know whether I can give it to you.

26555. Roughly ?—I think there is one that has had about 400,000 tons.

26556. In these mines you have stated, I think, that there is a great amount of working open ?—Some of them are very extensive.

26557. Have you had any watering ? Is it done in New South Wales ?—The main roads are watered where safety lamps are in use to a considerable extent.

26558. How is it done ?—By tanks.

26559. Is anything done in the way of spraying the roofs or sides ?—Only locally. There is no general system. I may say in my own colliery we water with a hose, but only in the vicinity of shots, and we have no shot-firing in coal. It is only in stone. Very elaborate precautions are taken. We have a pump and a hose.

26560. For shot-firing ?—Yes.

26561. To what distance ?—30 or 40 yards from a shot, and we usually remove all the dust first. We take very elaborate precautions.

26562. Would systematic watering affect the strata ? —Yes, undoubtedly.

26563. In your opinion, could you water thoroughly the whole of a mine ?—In my opinion it is absolutely impossible. You could not even if it was not injurious. In many mines it would be impossible. Take my own case. The temperature is 83 degrees; it is very dusty, and there are many miles of travelling ways and return airways, large roads heavily timbered. Even if we had the water to spare it would be nearly impossible to keep it watered, the evaporation is so great. As a matter of fact, we have not got the water.

26564. What sort of roofs have you generally ?—Shale roofs. There are a few cases of sandstone.

26565. Those roofs would be affected by watering ?— No doubt they would.

26566. Going back to the explosion, how much of that three quarters of a mile would have been damp or wet, and how much of it dusty ? You have told us that parts of it were wet and parts of it were dry ?—I daresay probably three-fourths of it would be dusty.

26567. And one quarter of it would have been wet ?— Yes, but the outer end of it was damp.

26568. For how far ?—About 300 yards.

26569. For the last 300 yards ?—About that.

26570. (*Mr. Smillie.*) Have you many prosecutions of either officials or workmen for breaches of the Coal Mines Act ?—Yes.

26571. A considerable number ?—You will find them all in this book.

26572. Roughly, have you had many ?—I daresay in my own place I may have 10—10 to 14.

26573. I suppose the proportion of prosecutions to the number of men employed will be as large as it is here ?— I think more.

26574. Are all offences by workmen against the Mines Act prosecuted for if they are found out ?—Not necessarily, because I would have to have a court every day. Many are minor breaches which of course we cannot possibly prosecute for in every instance. They are let off with an admonition, or something of that sort.

26575. It depends upon the offence ?—It depends altogether on the character. There are some offences it is policy not to prosecute for. A man will take more notice of a lecture than a prosecution.

26576. Have you any system of management fining the workman guilty of a breach of the Coal Mines Act, or a breach of any Rule ?—We never fine for breaches of the Rules.

26577. There would be a prosecution for any serious breach of the Act likely to lead to loss of life ?—That is certain. There would be a prosecution in any case except of a very minor character. I do not say that it would apply to every mine, but there are a number of the best regulated mines where they are very strict.

26578. (*Mr. Ratcliffe Ellis.*) Do you fine for offences that are not provided for by the Mines Act ?—Only for the filling of debris. That is a matter of agreement.

26579. (*Mr. Smillie.*) There is no fining for breaches of the Special Rules or the Mines Act ?—No. I think that would be very improper.

26580. As a colliery manager you have had long experience; do you think it would be a mistake to have fines ?—Yes.

26581. Have there been many prosecutions of colliery managers or other officials ?—Yes, I prosecuted some of my own officials where they had neglected their duty. I would not hesitate to prosecute.

26582. Is the Inspector of Mines supposed to send on a list of all convictions against managers or officials to the Minister of Mines ?—Yes; they are all recorded in the Blue Book.

26583. If there is a serious breach of the Act or a report of incompetency made by the Mines Inspector, has the Minister of Mines power to appoint a court to hold an enquiry, and has that court power to cancel a certificate ?— Yes, it has been done. There have been several enquiries that have lasted only too long, I am sorry to say.

26584. You accept first or second-class certificates granted in Great Britain to colliery managers in New South Wales ?—Yes, without question.

26585. You do not allow any person to be in charge of either winding engines or haulage engines or electrical engines unless they hold a certificate of competency ?— No, it is scarcely that. That is restricted to winding engines only. A Bill was brought in requiring all men in charge of machinery of every class to hold certificates, but after representations were made to the Minister he altered it confining the certificates to winding engine-drivers only.

26586. Was that since 1901 ?—That is only quite lately.

26587. The Act of 1901 provided for certificates of three classes ?—I do not think so, you have got it wrong. Was that metalliferous mines ?

26588. The Mines Inspection Act of 1901 published in 1906 ?—That applies to metalliferous mines.

26589. Only ?—Yes, I am referring to coal mines.

26590. This only applies to metalliferous mines ?—Yes, there is a reason for that. In metalliferous mines nearly everybody in charge of machinery has occasion to wind men up little staple shafts and so on, but in coal mines it is only the winding-engine drivers who have to wind the men.

26591. In coal mines winding-engine drivers require a certificate of competency ?—Yes, but I think it is a great mistake.

26592. That at least is the law ?—That is the law, and I think it is a great mistake.

26593. (*Mr. Ratcliffe Ellis.*) Is there any objection to saying why you think so ?—I maintain that a winding-engine driver's duties are such that you cannot find out his qualifications for the position by examination. It is a matter of his moral character, his judgment, his nerve, and no examination in the world will ever find out whether the man possesses the necessary qualifications for that position. We do not need a man, nowadays, having a knowledge of mechanics, at least a very intimate knowledge of mechanics, for the position of a winding-engine driver. He is sitting there all day long and has not to go near the boilers, in fact he does not need to supervise them at all. In all collieries nowadays there is a mechanical staff looking after the condition of the machinery.

26594. (*Chairman.*) What about the examination for physical fitness ? It has been stated that on more than one occasion in England a man has died suddenly from heart disease, which might have been found out if he had been examined periodically. Do you examine periodically? —Not periodically. Under the Act there are some certificates of service granted, and the candidates for certificates at examinations have to produce medical evidences of their fitness.

26595. Where it may involve a serious accident if a man had a sudden attack of any sort, would you have any precaution to find out periodically whether a man's health was such that he could be fairly well trusted ?— No, there is no periodical examination. I think there is a good deal more reason for that than the examinations for competency in other respects because it is a man's moral and physical qualities more than anything else.

26596. You do not have anything in the nature of a medical examination. A man may go on 30 years and have developed some disease which may kill him suddenly, and you know nothing about it. You do not, as a matter of fact, try to detect anything of that kind ?—No, I agree. I think it is a proper position that they should be periodically examined, at the same time we have never had any accidents. That is one of the reasons I advanced to the

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Minister for restricting the issue of those certificates to winding-engine drivers, that we have never had any accident.

26597. (*Mr. Smillie.*) We may take it that you disagree with the Government, and you say that the Government were wrong in passing that law?—That is hardly a fair way to put it. I would much sooner take a certificate of character or fitness from another manager than I would take the certificate of the Government. The examiners sit a few minutes, or it may be half a day, and how can they know of a candidate's fitness for the position of an engine-driver?

26598. Do you apply the same opinion to colliery managers' certificates?—No, that is a different thing. Colliery managers' qualifications, to a great extent, can be discovered by examination, but you can see that a winding engine driver's fitness is a matter of moral and physical qualities.

26599. Have you any ideas of the views of engine drivers and miners in New South Wales?—Of course there is a craze for certificates everywhere; it tends to create an exclusive caste, and there is no doubt as to what their opinion would be.

26600. You consider it a craze only?—Yes, I think it is a craze. I have two winding-engine drivers who have been performing their duties for about 18 years and under very difficult conditions. The winding is very quick, and they have never made one mistake, and I am absolutely certain that if they were put through the examination most assuredly they would be plucked. I have another young fellow, only about 21, who is absolutely incapable of handling these winding engines and still he has a certificate, and he has the higher status of the lot, and I would not give him their duties to-morrow.

26601. Have you ever known colliery managers who were good colliery managers, and who would have been plucked if they had sat for a certificate?—Yes, I daresay.

26602. I suppose you are aware that some excellent men when the Act came out got a service certificate who would have been plucked at an examination?—There would be no necessity to be plucked if they got a service certificate.

26603. Who would have been, that is what you said about your two engine-winders?—I think that is very likely.

26604. That did not prevent the passing of the Act that made it compulsory for colliery managers to pass an examination?—The cases are hardly parallel. In the one case it is mental ability and in the other case it is physical ability.

26605. An engine-winder requires, under this Act, to have a considerable knowledge of machinery?—There is a distinction as to the requirements of engine drivers in the Metalliferous Act.

26606. I am dealing with the winding engineman?—There is a difference between the two. There is the metalliferous mine and the coal mine. In the metalliferous mines the men's lives are more or less dependent on other men. Nearly every man is in charge of machinery because there are little winches underground winding up staple shafts.

26607. It is more necessary that there should be some care taken in the appointment of the men?—Yes. I agree that we did not raise any objection to it being confined to engine-winding men.

26608. Has it limited your choice in any way to the number of men?—The Act has not been long enough in operation to express any great opinion about it. Experience in the Transvaal from all accounts is rather unfortunate. They have all certificates there and in no part of the world are there more accidents in winding shafts.

26609. (*Dr. Haldane.*) Are the engine drivers certificated in the Transvaal?—Yes, they are all, and it is a very unfortunate state of affairs the number of accidents in winding shafts.

26610. (*Mr. Smillie.*) I suppose a man, who is otherwise qualified, who has a good moral character and who is a good engine-winder would be no worse supposing he had a certificate?—No.

26611. Provided he had the other qualifications. Nerve is one of the chief qualifications necessary?—Yes.

26612. Did I understand you to correctly state to Mr. Ellis that the persons going from Great Britain to New South Wales and wishing to sit for a certificate do not have to satisfy the Board but the examiners. I understand you are chairman of the Board?—Yes.

26613. Do you say they do not satisfy the Board as to their qualifications for sitting, but that they satisfy the examiners?—In the same way as the other candidates. We lay down rules for the examination, and the Board formulate these rules and the examiners satisfy themselves as to the testimonials of the different candidates.

26614. The system is here before they are allowed to present themselves to the examiners they must satisfy the Board through the secretary that they have had the qualifications. A person presenting himself from New South Wales for examination here would, in the first place, require to satisfy the Board, not the examiners?—Of course the testimonials are sent in to the secretary of the Board, but these are dealt with by examiners, and the examiners report to the Board.

26615. It is possible that candidates outside of New South Wales might get the length of the examiners, and might be objected to there. That is not possible in this country?—After all, the Board is not any more fit to investigate the qualifications of candidates than the examiners.

26616. I wanted to make sure whether that was your method?—Yes.

(*Mr. Ratcliffe Ellis.*) The question as to whether a man is qualified to sit does not depend upon his ability to pass an examination: it depends upon having complied with certain regulations made by the Board. Therefore I think it is rather for the Board to say whether a man is qualified to sit or not: whether he is qualified to pass the examination is for the examiners.

(*Mr. Smillie.*) He may be qualified to pass, but the examiners might prevent him sitting?

(*Witness.*) Yes.

26617. In our case the Board does that?—Yes.

26618. There is five years practical experience required before a candidate can sit in this country?—Yes.

26619. As Mr. Ellis pointed out in your rules a three years' apprenticeship to a mining engineer may be substituted?—That is the same in some of your districts.

26620. This is how it was at one time.

26621. (*Mr. Ratcliffe Ellis.*) In the northern counties they have something of the sort?—I think in more than one. When we formulated these rules we had nearly all the rules for examination before us. I am positive that is so.

26622. (*Mr. Smillie.*) Is there any serious grievance on the part of colliery managers in New South Wales that they are not permitted to come to this country: that the certificates are not accepted here?—Yes, there is, and there is a great deal of feeling: it is a question of status. We accept the Imperial certificates without question, and if we have men as capable as they are here, and the experience to be gained is as varied, why should our certificates not be accepted? They are gained at an examination which, we submit, is in all respects similar to the examinations in the British coalfields.

26623. Is the coal trade of New South Wales developing rapidly?—Yes.

26624. Is the supply of colliery managers passed by your own examiners sufficient to meet the demand?—I should say that it is more than sufficient to meet the demand. It does not at all follow as in British coalfields that every candidate who passes will obtain positions.

26625. (*Mr. Enoch Edwards.*) Or that he will get a position when he has passed?—Yes, that is so.

26626. (*Mr. Ratcliffe Ellis.*) Are the Special Rules similar?—In some cases a great deal more elaborate: in my own colliery we have about 260 of them.

26627. (*Dr. Haldane.*) Can you tell me whether there is a separate examination in New Zealand for colliery managers' certificates?—I think so.

26628. It will be well to settle this question in all parts of the Empire while we are at it, if it can be done?—Every application would have to be taken on its own merits, because it is obvious that except New South Wales and probably New Zealand there is no other State in the Commonwealth that is entitled to ask for it on its merits. We could not, for instance, ask that applications from the whole of Australia should be granted.

26629. I do not know anything about Canada; it is an important part of the Empire?—I do not know sufficient of Canada to say.

26630. Supposing the manager of an English metalliferous mine goes to Australia, he must pass an examination

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before he is allowed to manage an Australian mine: is that not so ?—I cannot speak with any confidence about metalliferous mines, because I confine myself to coal mining.

26631. There is no official English certificate, and that is one of the questions referred to the Commission ?—It would have to be reciprocal, of course, I should say. The conditions are reversed in metalliferous mines, because metalliferous mining is a much more important industry there than here, but of course in regard to coal mining it is out of all proportion greater here.

26632. They do insist upon an official certificate for the manager of a metalliferous mine in Australia ?—Yes.

26633. There is no certificate in England ?—It is a very small industry here.

26634. It is very unfortunate for people who go out there from here ?—Yes.

26635. Are there any arrangements in your collieries for the men washing at the pit-head before they go home ?—None. I do not know whether we could make such arrangement, because water is sometimes a great consideration with us.

26636. Even enough to wash with ?—Yes, we cannot get enough to drink sometimes.

26637. The point you have raised about the difference between colza oil and mineral oil is a very important one. Do you think it is desirable to have experiments to get that matter settled ?—I think so; I attach very great importance to this point; I think we ought to have some reliable standard which you can go upon.

26638. Do you mean also a maximum standard for firedamp permissible in parts of a mine that are in work. I mean where the men are working ?—Yes.

26639. You think that is desirable ?—I think that it is highly desirable, because it is a matter of difference of opinion at present; it ought not to be a difference of opinion at all, there ought to be an official standard.

26640. Are you much troubled with black damp in your collieries ?—Yes, in some of the collieries. With efficient ventilation in some of the mines it is scarcely noticeable. We have a very curious composite gas in my own colliery; it may be the only instance known where carbonic oxide is given off naturally from the coal. There is the curious circumstance of firemen searching on the roof and also on the floor for firedamp; that seems inconsistent, but it is a fact. The gas is a composition in many places of carbonic oxide, carbonic acid gas and firedamp, and you very often find it on the floor, and it shows that characteristic blue cap on the floor just the same as on the top.

26641. You would have it sometimes on the floor and not on the top ?—We have it both.

26642. That might be because the gas was equally mixed. Can you have it on the floor and at the same time the air clear above ?—As a rule where we have it on the floor it is clear on the top, but we certainly have carbonic oxide given off naturally from the coal, and not from any combustion of powder or coal.

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26643. Does that carbonic oxide cause much practical inconvenience ?—No, I am inclined to think that scientists are a little out with respect to the percentage that a man may work in.

26644. How do you mean "a little out" ?—I consider in the early days, before we had our second shaft down, that frequently there was in the air a much higher percentage of carbonic oxide than our scientists declare it is possible for a man to work in.

26645. How do you know it was there ?—We know it was there; we had it analysed. I reported it to the Department of Mines and they all laughed me to scorn at the idea of carbonic oxide being given off naturally, but I had it analysed at considerable cost, and by a chemist from the Department of Mines, and the former was confirmed.

26646. I know the circumstances; there is some there. I think to substantiate your statement that it is possible to work in a larger percentage would require very good evidence, and it is very difficult to get exact analyses where carbonic oxide is present. Are you aware that the best re-agent for carbonic oxide is oneself or an animal ?—Yes.

26647. Do you consider that carbonic oxide is given off from the coal without any heating whatsoever in your mine ?—Yes; it is not so general now. It was more in the vicinity of a shaft and near to an enormous sheet of dolorite horizontal, but we do meet with it all over the mine, but not generally.

26648. The men are affected by it ?—The ventilation is usually so vigorous—we have 400,000 cubic feet.

26649. Not generally, but occasionally ?—Of course we can soon demonstrate it by cutting off the air for a little; you will soon realise that you have carbonic oxide to deal with.

26650. Does that air give you a headache ?—Yes, all the characteristics.

26651. Does it make you weak in the legs ?—Yes; it is certainly rather remarkable to see our firemen searching for firedamp on the floor.

26652. You think that they sometimes would get it on the floor when they cannot get it on the roof ?—I do not think it; I am sure of it.

26653. You are sure they would sometimes find it on the floor when it is not to be seen above ?—Quite sure.

26654. Do you know whether that is ordinary firedamp ?—Yes, ordinary firedamp mixed with carbonic oxide and $C.O._2$.

26655. Is there no question of it being a heavier gas like petroleum vapour, or anything of that sort, which is naturally heavier ?—No, it has been analysed.

26656. It is very difficult to make a mixture of firedamp and blackdamp which will be heavier than the air and yet show a cap ?—It is there. I shall be very pleased to demonstrate it to anyone.

26657. It is a very interesting thing ?—Yes.

Mr. HENRY DAVIES, called and examined.

STATEMENT OF WITNESS.

Mr. Henry Davies.

26658. (1) I am the Director of Mining Instruction for the Glamorganshire County Council and Secretary of the South Wales and Monmouthshire Mining Education Board.

I arrange schemes of instruction, deliver lectures, and conduct parties of mining students "touring" various coalfields. I have had 15 years' practical experience of mines at home and abroad, and have inspected mining schools in England, Germany, Belgium and America.

I advocate a system whereby lads in mining districts intended for work in the coal mines should be taught something bearing upon their occupation for the remainder of their lives before they leave school, *e.g.*, lessons on the following subjects are given in the Glamorgan primary schools to lads about leaving for the collieries:—

Coal, and how it is formed.
Coal mines gases, and how they become dangerous.
The safety lamp and how to use it.
How a colliery is ventilated.
How the coal is worked in a mine.
Rules framed for the colliers' safety.

In order to make the instructions real and effective, the school inspectors have been instructed to grant certificates to the lads who attend a full course of lessons and give evidence that they have benefited thereby.

I recommend, too, that every plan practicable should be adopted to continue the education of the lads after they have commenced their work at the mines, so that they may be instructed in rules framed for their safety and that they may be induced to take an intelligent interest in their surroundings and duties. This may best be done by evening continuation schools and technical classes.

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(2) The system adopted under the Glamorganshire County Council is the following :—

As there are many young miners anxious to continue their education from the point they reached in the primary schools, who are insufficiently prepared in the rudimentary work for admission to the technical classes, a special preparatory class in mining has been arranged for evening continuation schools. The syllabus for this stage includes instruction in the following subjects :—

(*a*) English grammar and composition.

(*b*) Mathematics — arithmetic, mensuration and algebra.

(*c*) Elementary drawing—freehand, model and geometrical.

(*d*) Elementary science of mining.

While, in order to arouse the interest of the student, t may often be necessary to approach a subject from the standpoint of the miner, yet there must not be any slavish narrowness of treatment in this respect ; generally the instruction in the preparatory subjects should be such as would be useful to any industrial student and, in fact, in many cases, the classes will be attended not only by those engaged in mining, but by others also engaged in such occupations as building, engineering, &c.

(3) This is a complete course, specially arranged to meet the requirements of those : (*a*) Who are desirous of securing certificates of competency of the first or second class under the Home Office ; (*b*) who are candidates for the mining or engineering scholarships offered by the Committee ; or (*c*) those who are anxious to become really efficient in the science of mining. The course is divided into four stages as follows :—

First Stage (First Year) :
- (*a*) Practical mathematics.
- (*b*) Mining.
- (*c*) Mechanics and heat.
- (*d*) Geology.

Second Stage (Second Year) :
- (*a*) Practical mathematics.
- (*b*) Mining.
- (*c*) Mechanical drawing.
- (*d*) Mine surveying.

Third Stage (Third Year) :
- (*a*) Practical mathematics.
- (*b*) Mining.
- (*c*) Applied mechanics.
- (*d*) Electricity and magnetism.

Fourth Stage (Fourth Year) :
- (*a*) Mining.
- (*b*) Mine surveying.
- (*c*) Heat and the steam engine.
- (*d*) Electric lighting and the transmission of power.

Efforts are made to establish preparatory, or first-stage classes wherever there is a populous mining village. Second-stage or advanced classes are fewer in number, and opened only at suitably equipped centres. The former classes are generally conducted by local teachers, who may be engaged at the collieries or primary schools during the day, and the latter by members of the Committee's travelling staff of teachers.

(4) A short course of special lectures has been arranged for officials and miners who, for various reasons, are not members of the Committee's evening classes. This course bears directly upon the cause and prevention of colliery accidents. Popular lectures are also delivered under the auspices of the Miners' Federation Lodges.

(5) The tours are at present arranged as follows :—

For students in Stage 2 : The South Wales Coalfield.

For students in Stage 3 : An English or Scotch coalfield.

For students in Stage 4 : A continental coalfield.

Twenty-five scholarships are awarded in each of Stages 2 and 3 and 20 in Stage 4.

The scholarships are awarded on the results of examinations, which are held by the Committee, in three of the subjects forming the mining course. Only students making at least 20 class attendances (or with the manager's certificate proving the student to have been engaged on the night shift, 15 attendances) in classes for the above subjects, and presenting themselves for the Board of Education Examination in Mining (Stages 2, 3 or 4) are eligible to compete.

The quality of the student's homework (as presented on exercise books) is taken into consideration when the scholarships are awarded. Teachers are expected to make two reports during the session, showing the marks possible for, and secured by all students in their classes.

The value of these scholarships is as follows : For continental tour, £8 ; for English or Scotch coalfield, £4 ; for South Wales coalfield, £3.

A limited number of these scholarships are awarded to teachers of evening technical classes, taking at least two of the subjects forming the mining course, and teachers of evening continuation schools who have taught the preparatory course in mining at their schools.

One-half the amount of the scholarship awarded will be paid the student when he enters upon the tour, and the remainder on receipt of a satisfactory report on the collieries, &c., visited, provided that the report be received within one month of the return of the party. If the report be not received within one month, one-half of the scholarship will be forfeited.

The privileges of these scholarships may be enjoyed by students only once in each stage.

The continental tour occupies at least eight days ; English or Scotch tour, about six days ; and South Wales tour, six days ; each commences early in July.

The special summer course of instruction in mining and correlated subjects, arranged for students qualified for instruction in the higher parts of the mining course, is held in August or September.

(6) During the session 1905-6 no less than 28,000 pupils attended the Glamorgan evening classes.

In mining technical classes, of which there were 76, 1,730 students were enrolled ; in the 33 mathematics classes, 800 ; 52 ambulance classes, 1,381, and 25 engineering classes, 527.

(7) During the last few years I have taken considerable interest in the duties and hours of colliery firemen (examiners), and would strongly urge upon the Commissioners the desirability of recommending that arrangements be made whereby these officials should pay greater attention to the actual supervision of the miners when at work. I believe that more thorough and effective supervision would quickly effect a reduction in the number of accidents ; and, further, think that a "shift" of 12 hours and upwards for these men is too long. I beg to hand in copies of some returns I have secured as to the duties and hours of colliery firemen.

I further believe that these officials should pass a Government examination to prove their competency before being appointed to so important an office.

(8) *Ventilation.*—I would recommend that returns be made of the quantity of air passing through a mine once every 14 days, and that a record be kept of the air-current as shown by such measurement ; also of the percentage of gas present in the air-current at the last working place in a "split" when the air measurements are taken ; and that such records be always available for examination by the Government inspectors.

(9) *Traffic on Main Roads.*—It is advisable, too, that haulage should be stopped on main roads and engine planes at the beginning or end of a shift, when workmen are passing to or from their work, unless special provision be made for the safety of the men.

(10) *Colliers as Hauliers.*—I would recommend that special provision be made to prevent accidents to colliers who are called upon to take the places of absent hauliers ; also that some effective steps be adopted to put an end to the system of "tipping" hauliers by colliers, as I think this is a fruitful source indirectly of accidents in some collieries.

(11) *Home Office Examinations.*—The present system of Home Office examinations for certificates of competency of managers or under-managers should be improved. Greater uniformity in the standard of requirements is desirable. The examiners should be changed periodically. Mining engineers who receive premiums from articled pupils should not be members of the Boards of Examiners, examining such pupils for certificates under the Home Office.

(12) *Appointment of Inspectors.*—I would respectfully suggest that some better plan than that in operation at present be adopted for the appointment of inspectors. The present system causes dissatisfaction, and gentlemen holding the position cannot expect that respect from colliery officials that they would receive if their appointments were made under a better system.

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(13) *A Knowledge of Welsh desirable for South Wales.*—The inspector, too, should have a speaking knowledge of the language generally used by the workmen in the mines, and by their deputations; *e.g.*, no inspector should be appointed to the South Wales district who does not thoroughly understand Welsh.

The number of inspectors, too, should be increased as to make the inspection of the mines "thorough"; but their visits should not be such as to make them jointly responsible with the manager for the working of the mine. At present the inspection is not in all cases effective.

26659. (*Chairman.*) I propose to begin towards the end of your statement and deal with the suggestions you make with regard to safety. You are, I think, the author of a book entitled "Colliery Accidents: Cause and Prevention"?—Yes.

26660. The book consists of various lectures you have delivered?—Yes.

26661. You say with regard to the colliery fireman, that you strongly urge upon the Commissioners the desirability of recommending that arrangements be made whereby these officials should pay greater attention to the actual supervision of the miners when at work, and you believe that more thorough and effective supervision would quickly effect a reduction in the number of accidents, and that a shift of 12 hours and upwards for these men is too long, and then you hand in your returns. We should like to hear your views upon that?—I have the actual returns here, should either of them be questioned.

26662-4. You have the returns in your book?—Yes. I have the names of the people who made the returns in each case, and the names of the collieries.

26665. You say that they should pay greater attention to the supervision of the miners at work. Do you mean that should be their only work, and that they should not be required to do any other work?—I think they can do other work as well as supervise the operations of the men. But what I want them to do is to attend more to ventilation than to rubbish trams, more to firedamp than the time taken by men to fill repair roads. I think if that were done there would be a very considerable reduction in the number of accidents, and that speedily.

26666. You mean that now they do not attend to their chief duties as much as they ought. Although it is well to attend to the general working of the mine and see that the men fill the trams quickly, or that they are moved quickly, which has nothing to do, or little to do, with accidents, their main duty should be to guard the men against accidents, and they should only do these other things when there is plenty of time to spare from their duties?—I believe their time would be so occupied in attending to safety that they would have but little time to spare.

26667. Would it not be better to say at once that the fireman should only attend to duties in connection with safety, and that other people should look after the management of the mine in other respects?—Yes. I believe the overman and under-managers would have enough work in looking after the general traffic and business part, and that the firemen have enough to do in looking after the real safety of the mine.

26668. Although there may be occasions when firemen might have time to attend to the general working of the mine, still it should be understood that his business is to look after safety and do nothing else?—Yes, I would tie the examiner down to that work appertaining to the safeguarding of the workers' lives.

26669. Do you think that as a rule the firemen's districts are too large?—Judging by the reports which I have compiled, they are considerably too large, especially when they have to carry round in the morning two safety lamps, a staff, an electric battery, a cable, and then have to stand and examine for firedamp a hole which may be 10, 12 or 13 feet in height.

26670. The shift of 12 hours is too long?—Yes, because I do not think they can be mentally alert for such a long time in the polluted air of the mine and the numerous occupations in which they are engaged.

26671. Do you suggest an eight hours' shift?—I do not suggest eight hours any more than seven or nine, but I think that the shift should be so reduced as to make the work thoroughly efficient.

26672. You think a seven to nine hours' shift would be about as much as they could do?—On an average I think if they work well and hard, and carry out the duties apportioned to them for eight hours, that they would be mentally and physically exhausted.

26673. You further think that they should pass a Government examination. What examination would you suggest?—I would not make it an examination like the under-managers', but where rules appertaining to ambulance, ventilation, management of air currents, registering of firedamp, and things of that kind, would be the special requirements.

26674. You would have a special examination: you would not think it necessary to pass a second-class manager's examination?—No. I think the second-class has more to do with the business side now than the safety side. I would make this examination to bear more on safety than the general management of the mine.

26675. You think second-class certificate men might pass and not be efficient firemen. They might not know sufficient about various matters that you deal with here to attend properly to the question of safety?—Yes.

26676. The second-class certificate compels you to know something about ventilation?—Yes. A man at present may sit for the second-class and pass with experience only fit for any colliery giving off carbon dioxide gas, and yet be appointed to a colliery giving off firedamp; he might pass an examination dealing with gas which he would never see in the future and had not seen in the past.

26677. Have you come across a considerable number of firemen not competent to perform their duties properly?—I have not come across one, or I would tell the manager immediately. At a colliery near where I live a man was Chairman of the Works Committee on Wednesday; there was a strike on, and on Thursday he was appointed fireman; on the next day the strike ceased. This is an exceptional case. The man was a very good workman, a good miners' agent and would, as a rule, make a good official. There are complaints of cases of that kind. I do not say that this man was inefficient, but I say that he was Chairman of the Works Committee one day, and the next day he was a fireman.

26678. (*Mr. Ratcliffe Ellis.*) What is the Works Committee?—A committee of workmen that has to deal with an arrangement between the owners and the men on matters appertaining to disputes with regard to wages, or other matters of that kind.

26679. (*Chairman.*) Why should he not be a good fireman?—I did not say he would not be: I only say it happened to be a coincidence that a chairman of a Works Committee should be specially selected during strike time to become a fireman.

26680. (*Mr. Ratcliffe Ellis*). As chairman he was telling the colliery owners what to do, and so they appointed him an official to do it?—The next day he would tell the men what to do. I am quoting that as a case in point, because it proves the need of examination.

26681. (*Mr. Enoch Edwards.*) It would be a way of breaking up the strike?—I do not suggest that. I state it as a fact.

26682. (*Chairman.*) You have had no practical experience of any accidents through a fireman not having passed an examination?—I have a considerable number of reports here, and judging by the way some of them are filled up I believe the writers should have passed an examination dealing with the nature of firedamp.

26683. Looking at those reports you say that there are a certain number of firemen employed who are not capable of making a proper report?—No, I will not go so far as that, but I think that their reports would be better if they had been compelled to pass through a training for an examination.

26684. Do you say that the reports are absolutely unintelligible in many cases? What is the objection to them?—They are too indefinite. There is a lack of the trained mind: where a man writes "some" gas or a "little" gas, for instance. In some districts to-day we go to a place and an old workman will say "They complain about the gas now, but there is only a thimbleful. We worked years ago with a wagonful, and there was no complaint then." Men brought up under a system of that sort have to be taught a great deal more as to the value of detail, accuracy and correctness in making reports.

26685-6. With regard to ventilation, the returns should, you think, be made once in every 14 days?—Yes.

26687. Is not a record kept?—A record is kept. There is a record of measurements made once a month, but I

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want to have them kept when they are made once a fortnight. Whilst they are measuring the air I want them to measure the gas, so that we may know not only the quantity but the quality of the air current. I want them to measure the number of cubic feet passing at the last working place, and I think that the percentage of gas present at that spot should be recorded. Now they examine for gas with a lamp that shows only 2 per cent. whereas 1 per cent. in the presence of fine dry coal dust, forms an explosive mixture.

26688. How do you detect 1 per cent., by having mineral oil?—No, they now use the Davy lamp, which will not show practically less than 2 per cent., whereas it is an acknowledged fact that 1 per cent. with fine dry coal dust forms an explosive mixture.

26689. How do you test that?—With a Clowes' lamp.

26690. How little will that show?—½ per cent., if necessary, or less. The Clowes' lamp is the only one I know as being really useful.

26691. With regard to the traffic you say that haulage should be stopped on main roads and engine planes at the beginning or end of a shift when workmen are passing to or from their work, unless special provision be made for the safety of the men. What special provisions would you suggest if you do not stop the haulage?—A travelling road, or a part reserved for the men to walk, where there would be no danger of being run over.

26692. You would have a gangway?—Yes.

26693. Always kept clear, not only at the man-holes, but so that you could instantly step aside anywhere?—Yes. When I was at one of the collieries there was a wild run, a tremendous noise and a shout; there was not sufficient time to search for a man-hole. We got to the other side of the shaft and the trams ran into the "sump."

26694. With regard to colliers as hauliers, you would recommend that special provision be made to prevent accidents to colliers who are called upon to take the places of absent hauliers, and also that some effective steps should be adopted to put an end to the system of "tipping" hauliers by colliers, as you think that is a fruitful source indirectly of accidents in some places. That is the first time I have heard of this practice. Do you mean they do it in order to get down to the shaft quickly?—No. A collier in Monmouthshire "pays rent" before possibly he will get his tram in time, or a suitable supply of timber, and I hold that that is a source of a number of accidents.

26695. Who does he pay the money to?—To the haulier. The collier pays the haulier.

26696. The haulier being the person who brings the tram?—He takes the tram, and in the tram frequently there is the timber that is going to the collier.

26697. The haulier shoves the tram on to the working face?—He drives it by means of horses.

26698. He is the man who looks after the horses?—Yes, and if he gets a tip he naturally takes to that collier the first tram of a journey.

26699. (*Mr. Ratcliffe Ellis.*) We have an Act of Parliament ready to your hand, the Prevention of Corruption Act?—I hope you will see that it is applied.

26700. (*Chairman.*) That is the first time that I have ever heard of that practice?—We want better supervision. If we get better supervision they may have time to apply that Act.

26701. (*Mr. F. L. Davis.*) Does this apply all through Monmouthshire?—It applies to the colliery where I made the enquiries, and it applies to some parts of Glamorganshire, too, unfortunately.

26702. I do not quite understand what it is. Will you explain it?—I will tell you how it is done. In Glamorganshire we have, unfortunately, in some collieries what are called occasionally a "trump Saturday." There is a man who divides the journey. He is the supervisor amongst the hauliers, and he has six hauliers or less working under him. He divides the journey and may send the first tram to the man who has given the tip on the previous Saturday. This man collects all the tips on the pay Saturday, or half-pay Saturday. There is a main haulage road, and if there is a man in a stall wanting timber who has not paid his "rent" or given "trumps" the previous Saturday, he may not get the timber in time, as it is taken on to the man in the next district. This man may be working in an exceedingly dangerous place requiring timber, but because he didn't pay this "rent" on the previous Saturday he has to wait for the timber.

26703. (*Chairman.*) Do you know that as a fact?—Yes.

26704. You know where a man has complained that he has had to wait for his timber because he has not paid his rent, as he calls it?—Yes, but with better supervision that would be made impossible.

26705. You recommend that special provisions should be made to prevent accidents to colliers who are called upon to take the places of absent hauliers?—Yes. A haulier may be absent and a collier is called upon to take his place, but that collier does not know the horse and the road, and when tram gets off the road the collier tries to push it back. There may be a sound as if everything is right, and the horse starts off and the collier is banged against the side, and gets his back sprained or worse injuries.

26706. How do you suggest to remedy that?—I have not a suggestion. I only want to point out that many accidents arise from that cause.

26707. You think that people are obliged to take duties that they are not competent to perform?—I am not sure if they may be compelled. There is a dispute as to the extent to which a collier may be compelled to take the place of a haulier, but I know that he does occasionally.

26708. Does he get more wages?—As a rule a haulier gets less, but they make him an allowance to make up for the difference.

26709. (*Mr. F. L. Davis.*) May I explain it, or will you explain it? The hauliers are erratic men, and not regular in coming to their work. If a haulier is not there the collier does not get trams or clearance, and cannot make money, and when the hauliers do not turn up the collier takes the haulier's place to help the other men?—The collier has not always been willing to do so, and it is a question of the extent to which he may be compelled. There has been a case fought in South Wales as to whether a collier may be compelled. I know when he does he frequently gets into trouble by having his legs broken, or some other accident.

26710. Then you suggest that some better plan than that in operation at present should be adopted for the appointment of inspectors. Hitherto we have been told that the Government inspectors give every satisfaction?—To whom?

26711. In general?—The workmen in our district do not feel quite satisfied, and they want an increase.

26712. They are not satisfied with the present staff of inspectors?—They are satisfied with the present inspectors, but they are not satisfied with the present system of inspection. I hope you will pardon me for pointing out the difference.

26713. You would not like to say anything against the inspectors, naturally. You would like them to be treated fairly, but you think that the system may be wrong, although the men are very good men?—This is the system as far as it hurts a working collier who is a good man. We had a case where a man was put on the inspectorial staff without any examination. He was on for 12 months, and came up for examination at the same time as a collier who had only a month's warning of the examination. I hold that is not fair.

26714. You think that a man should be given every opportunity, and that he should not be called upon to go in for an examination suddenly which he would not be able to read up for?—I believe that all men should have the same opportunities.

26715-6. How do you mean, every man should have an opportunity?—The matter can be arranged so as to make a repetition of the case to which I have referred impossible.

26717. When a man is considered by the Home Office to be a fit person to sit for this examination he should be given ample warning of it?—In this particular case one man had 12 months' warning, and the other one had only a month.

26718. In those cases where the Home Office has come to the conclusion that an applicant is a proper person to sit for examination, you think that he should have ample notice and should be given at least six months' notice, or some minimum time, to work up for his examination?—They have at the Home Office quite a long list of candidates who have been nominated, and all those candidates who are considered qualified ought to have the same warning as to the date of the examination.

26720-31. It might have happened in this particular case that the Home Office had only just become cognisant that the man was a fit and proper person. It might be said that they had no opportunity of giving further notice than they did.?—It is quite possible. All the candidates who had been nominated and whose names were on the accepted list could have been told at the beginning of the 12 months, like the man who was appointed provisionally.

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26732. Then you say that a knowledge of Welsh is desirable for South Wales, and you think that no inspector should be appointed to the South Wales district who does not thoroughly understand the Welsh language. You also suggest that the number of inspectors should be increased, so as to make the inspections of the mines thorough, but that their visits should not be such as to make them jointly responsible with the manager for the working of the mine, and that at present the inspection is not in all cases effective. Then you say that a case will be quoted to prove this. What is your case?—A boy within the last few months had to go 148 yards to obtain a post underground in a mine in the borders between Glamorganshire and Monmouthshire. In another case the inspector was at a colliery enquiring into the cause of an accident—an explosion; the cause of that explosion at the time was unknown. Possibly it might have arisen from ignited firedamp meeting a damaged lamp, or oil on the gauze of the lamp, and during the time the inspector was there a number of safety lamps were brought to the pit top on a full tub of coal, placed carelessly on the ground and carried in the hands of boys to the lamp-room. I hold that the inspector should have seen this if the inspection was sufficiently keen. He should have prevented its repetition, because an explosion may arise from a drop of oil on the gauze assisting the passage of the flame through and so igniting firedamp.

26733. Irrespective of this particular instance that might arise from the carelessness of an inspector, you consider that the districts are too big?—Yes.

26734. You think that they ought to be sub-divided. Do you suggest that you should have double the number of inspectors or how many?—I would not like to suggest the exact number. I suggest that they should be so increased as to make inspection thoroughly efficient and make a repetition of what I heard on Saturday last impossible. A case was quoted where a colliery official had not seen the chief mines inspector for five years. That was at a large colliery.

26735. We find from the statistics that the inspectors do go down every mine in their district, or very nearly every mine in their district, once a year.

(*Mr. Ratcliffe Ellis.*) He says the chief inspector.

26736. (*Mr. Enoch Edwards.*) Had he no accidents during the five years?—Yes, there were accidents there, because that was the colliery where I found the boy who carried the post 148 yards. The boy thought that he had walked 200 yards to bring this post, but the distance was measured and found to be 148 yards; but I can easily understand a boy carrying a 6 ft. post thinking it was 200 yards.

26737. (*Mr. Ratcliffe Ellis.*) What has that to do with the inspectors?—If the timber had been placed in a convenient position and easily accessible to the collier, the lad would not have had to walk that distance.

26738. What has the inspector to do with that?—He has to see that the timber is placed in a convenient position, or report the officials who are guilty.

26739. Are you speaking of the Government inspector?—Yes.

26740. (*Mr. F. L. Davis.*) How many inspectors do you propose to have in order to see that the timber in each man's place is in a convenient position?—I simply say if inspection is necessary at all it is advisable that it should be efficient.

26741. (*Chairman.*) Do you suggest that mines ought to be inspected underground by every inspector or assistant inspector more than once a year?—Yes.

26742. How often do you say—twice?—I should say that it is necessary at least twice a year.

26743. (*Mr. Ratcliffe Ellis.*) If the inspector must see that the timber is always sufficient, he must be there every day?—That does not follow. If he succeeds in bringing the officials and men into a good habit once every six months, the results will continue until he comes again. If the timber is not conveniently placed, as an inspector he is partly responsible, surely, for not seeing that the Act is complied with.

26744. (*Mr. Enoch Edwards.*) Do you suggest that the inspector was there when the boy was sent for the timber?—No.

(*Chairman.*) You suggest that the inspector did not go round the working places to see that the timber was where it should be.

26745. (*Mr. Ratcliffe Ellis.*) To see that it was near enough. How is an inspector to do that?—How is he to see that the timber is placed in a convenient position?

26746. Yes?—The Special Rules specify that the timber should be placed in a convenient position.

26747. The General Rule specifies where the timber is to be placed. That is the duty of the manager?—Yes, and who is to see that the manager carries out that part of the Act but the mines inspector?

26748. The inspector can only give a general supervision?—Yes.

26749. He cannot be responsible if the timber is not on a particular day within 100 yards of the place where it ought to be?—The mines inspectors are appointed to see that the Coal Mines Act is efficiently complied with, and if it is not, there is something wrong with the inspection unless the officials or men are prosecuted.

26750. Is your view that because upon some occasion a boy has to fetch timber for 100 yards therefore that is proof that that mine is not sufficiently inspected by the Government inspector?—No, that is one of the cases I quoted.

26751. I want to see the value of your opinion. Is that your opinion?—It is not my opinion.

26752. What has this boy got to do with the question of inspection?—I quoted one case that came under my knowledge to show that inspection was not efficient there.

26753. From the instance you have given to the Commission, you form an opinion as to the inefficiency of the inspection?—It was not from that single case that I formed my opinion.

26754. Then why do you give it?—I quote it as one case in particular. I formed my opinion from what I have seen generally.

26755. Is there anything better than that?—Yes, here is this case where the men did not get their timber because they had not paid their rent.

26756. Does the inspector know of it?—He ought to know, just as I do.

26757. How would he get to know?—I think that he should be sufficiently versed as to the condition of things underground in his district to know of these matters as well as I do.

26758. How long have you known of it?—For the last 12 months, and I have spoken against it at public meetings.

26759. Have you ever told the Government inspector about it?—No, because unfortunately that particular inspector holds such strong views that he has on more than one occasion attacked me for interfering with what might be called political questions; for instance, such a question as the reduction of the hours of firemen in the colliery.

26760. Surely a 1d. stamp would have taken this complaint to the inspector?—I think it is more effectual to speak about it at public meetings to which the miners are invited.

26761. The inspector is not invited?—He is invited to attend and has read the book giving these facts.

26762. Do you think that the inspector has read the book?—Yes, and he compliments me upon it.

26763. Have you put that in the book?—I do not think that particular case is quoted, but the other cases are here. It is simply a question of whether he has read the book, and he has done so.

26764. What is your experience as to the practical working of mines?—I have had 15 years' experience in visiting collieries, examining, searching, questioning, and generally that experience which a mining engineer would get.

26765. Do you mean actually doing the work of an examiner?—No, except I have done the work of an examiner in going round with him as an assistant and examining for myself.

26766. How long ago was it that you started on this work?—About 12 or 14 years ago.

26767. Is what you have put before the Commission from information given to you by firemen and examiners, and others?—And from information I have directly ascertained for myself in visiting the collieries, and in examining, searching and questioning, and doing the same as a Government inspector does.

26768. How come you to visit collieries?—I am a lecturer on mining and I should not like to lecture about things which I did not understand.

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Mr. Henry Davies.

10 July, 1907

26769. Do you visit with the permission of the owners?—Yes, I get the support of the owners invariably in South Wales. They encourage me to visit the mines and put every facility possible at my disposal.

26770. You have a large number of reports from examiners or other officials?—That would only be with respect to the duties of individuals and their hours of work.

26771. The information which you give to the Commission is founded upon those reports, and your own experience as to how far those reports are well founded?—The information with regard to the hours and duties I have got directly from the men themselves.

26772. Your present work is as a lecturer on mining?—I am Director of Mining Instruction for the Glamorganshire County Council and Secretary of the South Wales and Monmouthshire Mining Education Board.

26773. (*Mr. F. L. Davis.*) Did you ever work in mines yourself?—In what capacity?

26774. In any capacity?—Yes. I call it working just as the Government inspector does to go round and examine and search. I do the same kind of work as they do, and I presume a Government inspector would call it working. I have gathered my experience as a Government inspector would do.

26775. Had you any position as an official when you were working in a mine?—As a collier.

26776. Yes?—No, but I do not think that would affect my knowledge. I do not think it would be necessary that I should have worked as a collier before ascertaining these facts, any more than anyone should be a navvy before becoming a civil engineer.

26777. I only asked you if you had been a collier?—I have cut coal, if that is what you ask.

26778. Not worked as a collier?—No.

26779. Nor as an official?—No; on the other hand I have had the same training as most Government inspectors and mining engineers. They do not start by working on the coal.

26780. Did you say how long you had been visiting mines and getting the information which you are now using?—Yes, 15 years.

26781. You stated generally that the hours of the firemen were too long?—Yes, from the knowledge which I have here and which I can substantiate with the returns which I have. They run up to 12, 12¼, 11 and 13½ hours, and I think that the duties they have to carry out are too many.

26782. All over Wales do you say that the hours of the firemen are too long?—I would not express an opinion with regard to Pembrokeshire and Denbighshire, but as regards Carmarthenshire, Glamorganshire, Breconshire and Monmouthshire, I should say that they are too long from personal knowledge.

26783. In cases where men have complained that the hours are too long—I do not know whether they have done so—do you happen to know of your own knowledge, where the firemen have complained, that the management have met them?—Yes, I understand, and I want to be fair, that the general manager of the Ferndale Collieries has promised the men that he will give them the eight hours' shift before the Legislature will probably, or possibly, make it compulsory. The men, when they waited on Mr. Hannah, the general manager, were met favourably, and, although he did not specifically promise to give them eight hours' he gave them to understand that he would favourably consider the matter before it came before Parliament.

26784. I suppose you mean re-arranging the districts and hours?—Yes, in the other case also—Lewis Merthyr—the eight hours shift is in operation with excellent results.

26785. An eight-hour shift for firemen?—Yes.

26786. What is your opinion of the firemen, generally, in South Wales, I mean as to their competency and intelligence?—So far as intelligence is concerned, it is very much higher in South Wales than I have seen in Belgium, Germany, or America or Somerset. I believe if they had more opportunities of studying they would keep up-to-date, and, I believe, read the Government inspector's reports and the reports of this Commission. They are unable to do so at present, because at the end of a 12 hours' shift they are too tired to study.

26787. You have no complaint as to the competency of the firemen in Wales; your point is that the hours should be shortened?—Yes, shortened, in order to permit them to exercise that competency which they possess.

26788. This custom of tipping, or paying rent, you mentioned just now is rather new to me. That is not a general thing, I understand?—No.

26789. You would not say it is general throughout South Wales?—No, because in some co lieries where it did exist it has been stopped by improved supervision.

26790. What is your objection to that? What is your point with regard to it?—Where a collier has to pay tips to a haulier, he not only gets the preference of the first tram, but the haulier, too, gives the man the preference as to the best timber, and the first timber. When a man in Monmouthshire has not paid his "rent" this is what happens: the examiner comes round and finds a man has not stood a post where it ought to be stood, and then the poor collier complains that he had no post, and, possibly the boy has to go a considerable distance to look for it. Then the examiner turns to the haulier and says, "Why did you not bring this man a post?" and he replies, "He did not pay his rent last month." With improved supervision such a thing would be impossible. If a fireman had his attention directed to that instead of the number of rubbish trams which were being filled we could do away with the system.

26791. That is an arrangement that takes place between the hauliers and the colliers?—Yes, with the knowledge sometimes of the management, but the hauliers' wages would be so arranged that it is unnecessary to take tips.

26792. Whatever the regulations may be, can you prevent one haulier favouring a collier who happens to be a friend, apart from tipping?—One can make the tips unnecessary and the favouring an impossibility.

26793. That is an arrangement between the men themselves, sometimes with the knowledge of the management and sometimes without?—In this case I would assume as you do not know about it that it would be without the knowledge of the management or the owners.

26794. Do you think that any steps should be taken by the Federation and by the men's leaders?—Yes, I believe that every Federation Lodge should set its face very strongly against the continuance of a system of that kind. I believe that the management and the Federation Lodges could succeed in stamping it out. It is difficult at present because the management do not give that possibility for supervision which is necessary to prevent it.

26795. Do you know if any steps are being taken by the Federation. First of all, have you taken any steps to bring that to the notice of the Federation?—Not to the Federation, but to the miners themselves. I have spoken publicly against it. The lectures I give have been reported in the papers, but in some cases the officials deny its existence, although, I think, a salutary effect has already been produced. More people know of its existence now than knew originally. One member of this Commission has appealed to the men at the Annual Conference and asked all the miners and other workers to act as underground police, each to safeguard the life of the other. That was at the Federation Annual Meeting at Cardiff.

26796. And very good advice?—I want to repeat it once a quarter for 10 years and then, I think, it would be effective.

26797-8. How long have you known this system of tipping? Is it any thing new, or has it been to some extent existing for many years?—It is a very old custom, and it is less prevalent now than it was.

26799. On the subject of inspection you said your complaint was not against the inspectors as inspectors?—In the case I quoted relating to the lamps it is against the inspector, specifically.

26800. Generally speaking, you have no complaint against the inspectors, but against the system of inspection?—That is so.

26801. You also said you would have two inspections a year instead of one?—Yes.

26802. What is your opinion of thorough inspection?—Inspection such as to secure an application in its entirety of the Coal Mines Regulation Act and the General Rules and the Special Rules. At present it is impossible for an inspector who visits a colliery possibly once a year, or once

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in two years, to see that all the provisions of the Coal Mines Regulation Act are enforced.

26803. If he visits twice a year do you think he would be able to then ?—He would have twice as many chances.

26804. He can only then see what is going on when he visits the mine ?—It depends on the individual. He ought to see twice as much in two visits as in one.

26805. You do not think that the inspector should take any responsibility off the manager of the mine by frequently visiting the mine ?—No, I no not want to make him jointly responsible for the management of the mine, but I want to make him responsible to the Home Office for the efficient application of the provisions of the Coal Mines Regulation Act. Unless he visits fairly frequently he cannot see that its provisions are carried out.

26806. Surely he cannot be sure that the provisions are carried out unless he is there every day and every hour, can he ?—No, neither can a manager in a lesser degree, because he is not there the whole 24 hours.

26807. I agree ?—But the inspector can, by visits without notice, see better if he goes twice a year than once a year, that his instructions are carried out. If he goes in January and does not visit again till the following January he is not able to see whether the recommendations that he suggested in January are carried out or not during that 12 months.

26808. If the inspector were to be there at least twice a year that would be very much better than it is at the present time ?—Yes. I do not say it would be a perfect cure. So much depends on the individual. He would have twice the opportunities of seeing if improvements were carried out if he visited twice instead of once.

26809. Did you make a recommendation with regard to the fireman's duties; I mean with regard to measuring the air ?—Yes.

26810. What is your suggestion ?—I believe that it should be one of the duties of the colliery examiner to measure the quantity of air passing through his district at least once a fortnight, and also measure the percentage of gas at the last working place in each split once a fortnight. That should be part of the fireman's duties rather than measuring the work done by day men and keeping an account of the number of horses employed, and the work done by labourers, and the number of rubbish trams filled. I think it would lead to a reduction in the number of accidents if he were called upon to carefully measure the air and record the percentage of gas present. I do not object to this being done by the management for other purposes, but the fireman should be educated to make those records themselves.

26811. (*Dr. Haldane.*) You are not satisfied with the present provisions of the Act with regard to measuring the quantity of air. The Act provides that the quantity of air in the respective splits shall be measured at least once in every month ?—I believe that it should be done every fortnight, and at the same time not only the quantity but the quality of air-current should be measured as well.

26812. (*Mr. F. L. Davis.*) Do you mean to take that out of the hands of the manager and make it part and parcel of the Coal Mines Regulation Act that that work should be done by the firemen ? How would you carry it out ?—I would hold the manager responsible according to the Act for the ventilation of a colliery, and for the safety, as the Act stands at present, but I would put it as one of the duties of the fireman, so that the manager might measure for his own purposes once a fortnight, but that this examiner should take so much interest in his work that he could measure the quantity and quality of the air current.

26813. You think that is advisable. You do not go so far as to suggest that that should be in the Coal Mines Act ? —The Act says the place has to be examined every day before the men go in. I do not see why, since the examiner has to measure the percentage of gas daily, he could not do this other work fortnightly.

26814. The manager at the present time can decide. He can appoint anyone he likes to do that particular work, whereas you want the fireman to do it ?—I want the fireman to hold the responsibility, not to the Home Office but to the manager.

26815. You have told us that you go about the country giving a number of lectures on all sorts of questions relating to mining, particularly with regard to safety having regard to the precautions for preventing accidents ?—Yes.

26816. Assume an ideal colliery, and an ideal manager, and all the regulations being carried out according to the Coal Mines Act in proper form, then you would say that there would continue to be many accidents occurring ?—It would be impossible to make a condition of things so perfect as to make an accident impossible, but I believe we can aim at making them impossible, and in aiming at making them impossible we will succeed in getting an approximate remedy—or approach the perfect.

26817. Many accidents occur although the management has done everything it could, through carelessness of the men. I am not putting any more blame on to the men than must be put, I think ?—Is your point that some accidents still continue ?

26818. In spite of all the management do to prevent them?—I do not know of more than one case at present where the management has done all that is possible to prevent the accidents.

26819. That is a matter of opinion ?—You should fairly have given these men—the firemen—opportunities for carrying out efficiently the duties entrusted to them, and until you do that you have not done all that is possible. I hope you will pardon the attitude I take in regard to this question.

26820. You would agree that a number of accidents occur owing to the carelessness of the men not taking all precautions for their own protection ?—Yes. At the same time the owners have not taken all the precautions possible for their protection.

26821. In your lectures you try to bring that to the notice of the workmen ?—Yes.

26822. You impress upon them the necessity of taking precautions to protect their lives and the lives of the other men ?—I address the men with regard to the timbering and speak very strongly against procrastination. Then the men ask me what I am paid by the officials for attacking them so severely. At other times I censure the officials for acts I consider wrong, and they accuse me of playing to the gallery. My position is thus rather an interesting one. But I do what I consider right, and attack the whole system when I consider it wrong.

26823. You think by your lectures and the men's agents constantly bringing before the men the importance of considering their own safety and that of others that may do good and prevent accidents in the future which occur now owing to their carelessness ?—As far as Glamorganshire is concerned, the Federation Lodges already invite lectures on the cause and prevention of accidents. They put up notices at the pit-heads: they pay the cost of the lectures as far as publishing and providing the room are concerned. The Federation Lodges of Glamorganshire are practically doing all that is really possible in that direction.

26824. Your particular work, you believe, does a good deal towards preventing accidents ?—I am hoping so. Sometimes I feel depressed as there does not appear to be much fruit as yet, but I believe the work is productive of increased intelligence and mental activity on the part of the men, and that will gradually reduce the number of accidents.

26825. (*Mr. Wm. Abraham.*) Going back to the question of effective and thorough examination, will you explain further what you consider to be a thorough inspection ? Is it a kind of inspection a mines inspector does, or a workman inspector, once a month?—By efficient inspection, first with regard to examiners or firemen, I mean such an inspection that will make reports on details possible. Now, for instance, in one colliery the examiner starts round his district, and his district is so large that he is unable to cover it, and the haulier does a portion of the work for him. The examiner reports the work done by the haulier in a district which he himself has not seen, and possibly shot-firing will be carried on in that district. Inspection by examiners or colliery firemen should be such as to enable them to say, when there is an inquest after an accident, what was the percentage of gas in a certain district six months back. I want the examination by the fireman to be such that he can draw a curve showing the percentage of firedamp present, and that curve would follow the ordinary barometer curve, that is made automatically every day. If the firedamp curve is made fortnightly, we would have valuable information at the time of the inquest as to the relation between the barometrical curve and the firedamp curve, and the exact percentage of gas in a mine six months before. That information can be got with very little trouble, and the attempt at getting it would amply repay for the trouble and time taken. It would make the man take more real interest in the work itself.

26826. That is an examination which would require more technical knowledge than this body of examiners

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generally possess?—Not much. With an ordinary blue cap they manipulate the flame carefully and practically. With another kind of lamp that manipulation, which takes two or three minutes, would be unnecessary. You would have a scale at the side of the flame, and by another kind of flame the fireman could tell the actual percentage of gas present mathematically, instead of according to his own eyesight, which might be perfect or impaired, and, according to his opinion the percentage of firedamp present would vary.

26827. For the assistance of the examiner you would have a lamp specially made in order to enable him to measure the gas easily?—Yes.

26828. Would frequent inspection of the mine made by the workmen themselves assist us in the direction of reducing the danger in the mines?—Yes. I believe that the report of the workmen inspectors, if presented to the Federation Lodges, would so rouse the interest of the men and the leaders in the actual things as to seriously reduce the number of accidents.

26829. You know from your own knowledge a number of South Wales collieries?—Yes.

26830. Take one of the large valleys of the Rhondda. There is Lewis Merthyr, Cymmer, Gelli, the Ocean and Ferndale. How many days would it take a person to make a thorough inspection of such a colliery?—Do you mean one person.

26831. Reduce it to four, or half a dozen. You are talking of a thorough examination?—Yes. If you took a large colliery where there are 1,500 men employed, it would be impossible to get an efficient inspection of that colliery in a day. The Government inspector, as a rule, spends about half a day under ground, but to examine or efficiently inspect a colliery of that kind would require at least several days on the part of one man.

26832. In order to get a thorough inspection done by the Government officials it would require a great number of men, but not of the highly technical training that the inspector possesses at the present time?—Quite so. The Government inspector frequently has to report upon winding engines, hauling engines, ventilating machinery, and pumps. That has not so much to do with the actual working dangers of the mine. There should be an inspection of a different character with regard to the inner workings of a mine, which could be carried through by men of a different type, possibly what we might term more practical from one standpoint, that is, the ventilating current, the percentage of firedamp present, systematic timbering. I believe, then, there should be an inspection of the workings themselves by men of a standard less high than that of our present Government inspectors, and yet that inspection for practical purposes would be thoroughly efficient.

26833. Do you recommend that there should be another grade of inspectors?—I believe that, should there be a possibility of increasing the number of the present staff it would be an advantage; but, seeing that it is almost impossible to expect a great multiplication of men of the same calibre as we have now, I would certainly recommend the other as the only possible means of securing thorough inspection.

26834. (*Mr. Enoch Edwards.*) Do you mean by "impossible" a question of cost?—The public purse. It is only a question of cost. There is a plentiful supply of men and talent, I believe, but I am simply thinking of the question of cost.

26835. (*Mr. Wm. Abraham.*) You have occasionally seen the reports made by the workmen that are appointed by the men to examine these collieries?—Yes.

26836. Do you consider that the examination, generally speaking, is a satisfactory one, or comes as near to thoroughness as the others?—Yes, as far as the practical operations in the working part of the mine are concerned I believe that the inspection by the workmen, where the workmen are competent, is more effective for practical purposes than the other, because, first of all, not only is the inspection itself better, but the report is discussed at the Federation Lodges, and there is a considerable interest taken in the condition of the mine. I believe that possibly in the future these reports will be made so as not only to have a bearing on the condition of the air and the supply of the timber, but that the workmen themselves will report to the Federation Lodges any man who neglects setting timber, or is guilty of procrastination in that direction.

26837. What position did you occupy before the present one?—I was head master of a large primary school, and I found that in my evening classes I was teaching the lads of a mining district that the word lamp was a common noun of neuter gender, singular number, and of a particular case, whereas I did not teach a boy how to handle his lamp, and I thought that was more important than to teach him that the word was a common noun.

26838. Why did you resign that position?—Because I had not the opportunity of teaching the boys how to properly use the lamp. I gave up my position to do so.

26839. How did you get your knowledge of mining?—I visited the mines in the night and in the morning. I visited all the mines in the neighbourhood, and, after visiting those of my own county, I visited the mines of Somerset, Cornwall, those of Belgium on more than one occasion, and those of Germany and America.

26840. To what extent is your work supported by owners, officials and workmen in South Wales?—I find this, that the more intelligent the manager the readier he is to support these classes. He is not afraid of his subordinates being made intelligent and up-to-date, but with regard to the less intelligent manager, I have more trouble to get him to support my classes. There is only one case where I have not been freely supported. As I have previously stated, when I deal with the question from the workmen's standpoint, occasionally I am charged with taking a partisan view of things from the workmen's position. If I speak of neglect of timbering very often the men think I am paid by the owners.

26841. You have told us that before?—That is the only point there.

26842. Do you receive general support?—Yes, I find that the men who gain their certificates in the classes are almost invariably promoted. There are a few isolated cases where they are not promoted. These men may have their certificates but do not possess other qualifications necessary in a good official.

26843. You have referred us once or twice to your having knowledge of mines in Belgium and Germany and in America. By what authority did you examine these mines?—With regard to the German mines we got an introductory letter from the Foreign Office—thanks to the services of one of the miners' representatives from Glamorganshire—and that enabled us to get into some of the German State mines.

26844. (*Chairman.*) Whom do you mean by "us"?—Myself and a body of students attending these evening classes. We take on these tours as many as 30 or 40 mining students to different parts of the country. On Saturday I take 30 men to the German mines.

26845. (*Mr. Wm. Abraham.*) Do you mean this next Saturday?—Yes, every man who goes on tour this year has to make a special report on timbering in all the different coalfields of this country and where we visit the collieries abroad.

26846. (*Chairman.*) Your pupils next Saturday will bring forward a report here on the German system of timbering?—Yes.

26847. You make them report on German timbering?—That is a special feature. They have to report generally. This is a copy of the report made by these students last year.

26848. You have several reports on German timbering already?—Yes; we have to get it more in detail this year. The last time they reported generally.

26849-50. (*Mr. Wm. Abraham.*) To what extent are ambulance classes supported in South Wales?—We have a very considerable number of students attending our ambulance classes. In Glamorganshire we have at present 52 separate classes with 1,381 students in regular attendance. The result is that at some of the collieries I visit there are as many as 100 men competent to render first-aid in the mines. These men are distributed through the various districts, their names are put on a board, and in one colliery there is a box with all the necessary apparatus for first-aid in each district. I would like to see that plan generally adopted so that we could get not only a competent first-aid man in the district, but also the appliances which he would find necessary to use.

26851. Do you find among the men themselves a readiness to be taught and to learn what is necessary for first-aid?—Yes, there is a very great desire and, even now, there is considerable enthusiasm shown with regard to the formation of proposed rescue brigades. We have been waiting until last month for the report of this Commission

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as to the best rescue apparatus. As soon as we have time to study that report we will establish rescue brigades. There is a keen desire on the part of the workmen to become members of rescue brigades.

26852. That kind of thing is well supported by the owners ?—Yes.

26853. Between them both you think that some considerable advantage will result from the classes going on at present ?—Yes, further than that, I believe that possibly the training of the men themselves will be one of the best means to make accidents practically impossible or to make the need of their help unnecessary. The training will make the men more intelligent, and this will be a preventive of accidents. So that I think the training will repay, apart from its need, when accidents occur.

26854. Has anything been done to establish rescue brigades ?—Yes, we had a conference at Cardiff of owners, officials and workmen and their leaders, and the greatest enthusiasm was shown, and it was decided then that as soon as possible these brigades should be established, and I have no doubt that at the beginning of next winter we shall have a number of men under special training in our district.

26855. You have been labouring largely among the colliery examiners ?—Yes.

26856. You have held meetings with them. Have you any special reports you could put in here, if necessary, to show what is really happening, and what hours these men are working. Have you any authority by which you can support that ?—Yes, I sent out a circular some time ago because I was asked by the authority under which I work to give a series of lectures on the cause and prevention of accidents. The first thing I did was to enquire as to what was the real cause of many of these accidents, since I had to address colliery officials. As the result of 200 or more returns I received I compiled a table, some portions of which you will find in this book. These returns are, I believe, from what I have been able to check afterwards, absolutely correct. The men were told "You are requested to exercise the greatest care in answering the questions so that they may be perfectly correct," and in order to get the information for certain I arranged a slip whereby the names could be cut off and only the forms supplied.

26857. Supposing the Chairman wants to know, could you give him the names of men and names of collieries where the thing is done and men who have actually gone through that experience ?—I could give the Chairman the names of the men and the collieries referred to in this book where the table is produced. I have them here, but they were given to me under a promise that they would not be divulged.

26858. What induced you to take up that work of assisting these colliery examiners ?—I was instructed to give lectures on the cause and prevention of accidents, and the first thing I had to do was really to find out what I thought to be the real cause of a number of these accidents, and I have come to the conclusion that a number arise from a lack of efficient supervision, and during the whole of the remaining course of the lectures I dealt more particularly with accidents that did arise from a lack of efficient supervision.

26859. Would you recommend that overmen at collieries should become certificated or pass some examination by some competent authority to qualify them for their duties ? —It may be considered advisable to make every official pass an examination, but it ought to be considered necessary that a fireman should. You already make it necessary for the manager and the under-manager of large mines to pass an examination. They have to deal mainly with the traffic and the output. It is therefore necessary that a man who has mostly to deal with the safeguarding of life and limb should also have a certificate in that direction.

26860. Do you wish to have the air examined every fortnight by the examiner with an improved lamp ? I think you have told us that. Where would you have it measured ?—I would have it measured, as far as the percentage of gas is concerned, in the last working place of each split. That would make it, I think, a rule that would be practicable, and the results would be reliable and worth recording. If you measure it in other places, the place might be varied with the views of the men, but if the examiner is told that he must measure it and record its quality in the last working place you would know what kind of air the workman would be working in.

26861. You have suggested also that you would have the traffic on the main road suspended while men are going in and out. What would be the result, do you think ?—It should be suspended unless there is a definite and safe travelling way, but the first result I think would be this. Apart from the reduction in the number of accidents on haulage or engine planes, which are pretty high now and frequent, this would be the result. If the men in the working places knew that the whole of the haulage would be stopped for 20 minutes or half an hour, or less, they would be more likely to leave their working places and come out. Now this is what happens. The shotsman starts at one end of the district; he assumes that all the men from that district have come out, but, unfortunately, they have not come out. They may be putting their places ready for the next day, and they may actually stay in their working places while shot-firing is going on at the other end of the district. If traffic was stopped, there would be one additional inducement for the men to get out at a specified hour in addition to the safety of the haulage road itself.

26862. That would, in your opinion, be a distinct advantage ?—I have no doubt about that.

26863. You are not satisfied with the system of examining for manager's certificates ?—No.

26864. How could that system be improved. What is against it ?—At present a man who receives a premium from an articled pupil may also be the examiner of that pupil for a certificate of competency from the Home Office.

26865. Is that an assumption on your part or is it a fact ?—It is a fact that there are mining engineers who receive premiums from pupils acting as examiners on the examining board. Then this is the danger: where there is rivalry between two mining engineers of a town, friction might easily arise in that direction; consequently, although the examiners may be above reproach and excellent men, as I have no doubt they are personally, yet they lend themselves to an attack in that direction which might be unnecessary if the system were improved. Another cause of dissatisfaction is this: a man may become a colliery manager for South Wales after failing to pass the examination for South Wales, but by passing one at Manchester, Wigan or Glasgow. That seems to me absurd. A man may not know the Special Rules of South Wales and yet he may go to Manchester or Wigan and pass an examination and come back to South Wales as a manager. The owners, we assume, will take the necessary precaution, but I want to make such a thing impossible.

26866. (*Mr. Ratcliffe Ellis.*) Do you say that a person who is going to be a manager in South Wales should get his certificate in South Wales ?—No, I say that a man who fails to pass the examination for his own district and sits for an easier examination——

26867. Or another examination ?—You assume it is harder but I assume it is easier because I know a man who failed in Wales and pulled through in Manchester. It is wrong for a man to manage a colliery in Wales when he has failed to pass the examination for the South Wales district.

26868. (*Mr. Wm. Abraham.*) What makes him incompetent if he has passed a certificate of competency in Manchester where there is also a necessity for him to be a competent man. Why is he not competent in South Wales ?—I would ask you the question, why is it necessary to have an examination for South Wales at all ?

26869. (*Chairman.*) If he fails in South Wales, between times he may get enough knowledge to make him pass in Manchester an examination just as difficult as South Wales for that matter. You are only talking of the question we have had before us over and over again, as to how far there ought to be one examination for the whole Kingdom or a special examination for each district, and that nobody should be allowed to be a manager in that particular district who had not passed the examination for that particular district ?—Yes, partly. I want a uniform standard for the whole country for the first-class certificate, and then I think that a certain amount of local knowledge should be added to that.

26870. (*Mr. Wm. Abraham.*) It is essentially necessary that a manager should know the rules of a district ?—Yes.

26871. The Special Rules ?—Yes. There is another position. A man may get his five years' experience possibly in a mine that is only giving off carbon dioxide gas, but he becomes eligible at once to manage a colliery giving off firedamp. Again, a man may have spent five years in a little level with only the mechanism of a shovel and a tram and become a first-class colliery manager and

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be eligible to take a position as a manager in a large colliery. Something should be done to make such things impossible. When a man has only five years' experience in a small level without any firedamp being given off he is not competent with that five years' experience to manage a large colliery, but according to the Act of Parliament he is qualified.

26872-3. What improvement would you suggest in that case ?—I should lay down certain qualifications in each district in addition to having five years' experience. The candidate should not only have five years' experience but particular experience in the kind of mines in the district where he intends becoming a manager.

26874. Have you dealt with the question of a knowledge of the Welsh language being necessary in Welsh mines ?—No, I have not dealt with that, but I hold that view.

26875. (*Chairman.*) I asked the question because I noticed that the witness had put it in his statement, and he said that a knowledge of Welsh was very essential ?—Yes, but I did not go into the details. I wanted to show how, for instance, a fortnight ago there was a miners' conference and inspectors were present, and that conference was conducted entirely in Welsh in Glamorganshire. The chief inspector did not understand what was going on. I think the mines inspector for that district ought to know the language generally used by the men for his own advantage and for the advantage of the Home Office. He might get information through an interpreter but that would be like pumping information out, instead of leaving it bubbling out of a fountain.

26876. (*Mr. Smillie.*) Why was it carried on in Welsh ? —Because they were Welshmen.

26877. Could they not speak English ?—The terms were Welsh and the surroundings were Welsh, and when they discussed in Welsh they were speaking their native language.

26878-9. It was not in order to make it impossible for the inspector to know what they were saying ?—No, there was an assistant inspector there who understood Welsh, and the chief inspector had to get his information through the assistant inspector. I think the chief inspector himself ought to be able to get the information direct.

26880. (*Mr. Wm. Abraham.*) You have spoken very strongly with regard to the timbering. What would you suggest with regard to the timber ?—What happens now is this, a fireman or overman goes round and finds a man has not put in sprag ; he cautions him but owing to his many duties he goes on and has not time to see that his instructions are carried out. If his duties were limited he would be able to come back and see that the instructions were acted upon. Possibly at the end of the Special Rules or on a board in the workings some diagrams could be put giving examples of good and bad timbering. Now the boy who works with the collier has to learn from a man who does the thing improperly. If there were diagrams showing how good timbering should be adopted and also the danger of bad timbering they would appeal to the eye and assist the memory. I have some diagrams that could be put up on the notice-board and the boy would not copy the bad things but would see the right way of doing it.

26881. Do you think that improper timbering is prevalent in South Wales ?—Not prevalent, but I believe it is occasionally found that a man does not know that he should stand a post at right angles to the dip. I sometimes find a man who uses a pick or a mandril to trim his lid instead of a hatchet.

26882. What kind of a trimming could he make of a lid with a mandril ?—A very poor one, but the danger is this, the boy sees that done. With better supervision this bad example would be impossible.

26883. Do you agree with the system of men preparing their lids in the working places or do you think that it would be an improvement if a certain number of lids were prepared and simply shaping them to a dip there left to be done ?—I think that second suggestion is the better one as far as the colliers' time is concerned. If they were prepared and he had simply to trim them he would be more likely to use them quickly than if he had to prepare them altogether.

26884. (*Dr. Haldane.*) How far has the system you advocate of giving instruction in colliery matters in primary schools been successful. Can you really teach these children ?—Yes, it is most interesting, for instance, here is a little book that they read. It is full of pictures and naturally the lads get interested. In a Welsh district the boys would have a lesson on the safety lamp by a teacher and they would go home and question their father or their brother or the lodger as to what kind of a lamp he used, or as to what kind of gas there was in one colliery and in another. With regard to the Special Rules, the boys would go home and ask questions of the lodgers and their fathers, and occasionally the fathers could not answer them with the result that they would come and ask questions in the evening classes. Through the boys we get to the homes. What faces a boy at the colliery immediately now is "No admittance except on business." He does not learn anything excepting to go quickly down the shaft and take the shortest cut to the stall. If he has his curiosity aroused he searches for himself and gets interested.

26885. Are things taught by showing the boys collieries, by taking them underground, or anything of that sort ?—They are taken periodically to the top of the colliery yard, and then they are taken underground. It is all taught in the school.

26886. Are they shown, for instance, the safety lamp ? Are they shown a cap ?—Yes, in the lamp room. They are taken to the lamp room and the lamp man is there making a test, and the teacher explains the principle. We supply them with a number of lamps and apparatus of that kind.

26887. It is evident that will give a lot of knowledge that will conduce to safety in mines ?—Yes.

26888. You recommend that records should be kept of the firedamp in the air ?—Yes.

26889. At the end of each split at the last working place ?—Yes.

26890. I suppose that you would also recommend there should be some maximum standard of firedamp in the air ?—Yes. As far as the Coal Mines Regulation Act is concerned, where it says an adequate quantity of air should be supplied—what is an adequate quantity ? It is a difficult matter to decide. The presence of a blue cap on an ordinary safety lamp is indicative of danger, and that there is not an adequate amount of ventilation.

26891. In your experience, is a blue cap common in the last working place in a split in a Welsh mine ? Have you often tested for it ?—I do not say that it would be common, but with increased care I say that it would be less likely to be seen. I do not mean to say that ventilation at present is inadequate, but if there was increased interest taken as the result of my recommendation I say that it would be improved.

26892. (*Sir Lindsay Wood.*) You said you sometimes took a party of boys to the mine itself to explain the character of the mines ?—Yes.

26893. And down the mine ?—Yes.

26894. Is that done by the sanction of the owner?—Yes.

26895. Who went with them ?—The teacher in charge of that particular class—the overman or the manager, or an official of some kind.

26896. Do they go all round the mine ?—No, it would not be necessary—the bottom of the shaft and the lamp room. We take them to the lamp room.

26897. On the surface ?—Yes.

26898. I thought you said that they went down the mine ?—Not at the school age, but immediately they left the school we took them underground. We take the boys of the evening continuation school, and technical classes.

26899. Who is "we"—your staff ?—Yes. We have about 70 classes, and these classes are conducted by a number of lecturers for advanced work and a number of teachers for elementary work. They have to visit the mines at least three times in the session to make the instruction thoroughly practical.

26900. Do the teachers of these schools take the boys to the mine and then go underground with them ?—Of the evening continuation school, but not of the day school. They keep the day school boys to the surface, but the evening continuation school pupils they take underground.

26901. They go round the mine ?—Yes.

26902. Whom with ?—The fireman, the overman, and the teacher.

26903. Is that a system in vogue in South Wales ?—Not in vogue generally.

26904. Do you not think it is a dangerous experiment ? —No, these boys would be 14 to 16 years of age.

26905. (*Mr. Wm. Abraham.*) It is approved of by the

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management ?—Yes, and encouraged. The officials, as a rule, are the teachers of the class. We get a good intelligent under-manager, or a good intelligent overman, and if he satisfies us as to his scientific knowledge we put him to teach the class in order to make the teaching thoroughly practical.

26906. (*Sir Lindsay Wood.*) What does he teach them underground ?—How to avoid the ropes.

26907. The art of testing for gas, or what ?—He teaches them about the gas in the lamp room at the surface.

26908. What does he teach them underground ?—About the system of haulage, the nature of the arches and the roadways in general, the application of the Special Rules, the system of timbering, the methods of working longwall, double road, &c.

26909. He lectures underground ?—Not exactly lectures. If we are going to Germany——.

26910. Will you please keep to Wales ?—The instruction is exactly the same. As soon as we get to the bottom of the shaft we deal with the haulage, the arching, and the rules with regard to safety. Then we go to the lamp locking station or deal with the methods of haulage ; then we go to the haulage engine room and describe the engines and the nature of the power, whether compressed air, electricity, or steam ; and from there we go to the working face and deal with the character of the seam.

26911. Is this all done underground ?—Yes.

26912. With a party of 30 or 40 ?—No.

26913. I thought you said so ?—There would be two or three men in charge if we had 30 students, and there would be separate batches.

26914. Is that done during work time or on pay Saturday ?—Sometimes on pay Saturday, generally evenings; night shift when there is less danger.

26915. When the pit is not working ?—There would be a few men working at the coal face, but there would be plenty to explain the system of working.

26916. You said that you found some managers who were more ignorant than others, and who were more difficult to deal with in these matters ?—I think I said less intelligent. I did not assume that they were ignorant.

(*Sir Lindsay Wood.*) Very well, I will take your word.

26917. (*Mr. Smillie.*) Did you say they could not be more ignorant ?—I said that where I found the intelligence was the greatest the readiness to assist the pupils was also the greatest, and where the intelligence was less then there was not so much interest taken in advancing the pupils to pass the examinations.

26918. (*Sir Lindsay Wood.*) What authority do you hold to communicate with the managers in this way ? —In what way ?

26919. Do you make a personal application to the manager or have you any authority from the County Council of Glamorganshire ?—We have never at present thought it necessary to get any authority. My applications are sufficient, I think, at present. We have never found any difficulty. No one has asked me by what authority I visit the mine. My visits are welcome because I do my best to increase the intelligence of the workmen, although it is necessary sometimes to blame the officials. They have never asked me for any authority, and they welcome my visits.

26920. You do not hold any authority from the Glamorgan County Council for this work ?—I do not understand your question.

26921. I do not know what position you are in ?—The Glamorgan County Council could not give me authority.

26922. You are a lecturer in mining of the Glamorgan County Council ?—Yes.

26923. You are a paid official of theirs to carry out certain instructions ?—Yes.

26924. To give lectures and so on ?—Yes.

26925. That would not authorise you to go to collieries ? —No. There is no public body who would have authority to empower me to visit a colliery in that way that I know of.

26926. I should have thought not ?—It is unnecessary. The interest taken in the work is such as to make any authority unnecessary.

26927. I thought that you had some official position ?—By which I could demand authority ?

26928. Yes ?—It has not been necessary to demand permission to enter, my visits are always welcome.

26929. Your position is to lecture on mining ?—I am a director of Mining Instruction for the Glamorganshire County Council.

26930. I thought it was rather that of criticising the working of the Mines Act at present ?—I beg your pardon. I criticise much, although I am a director of mining instruction.

26931. So I understand ?—Certainly, that is my duty. If I am asked to lecture on the cause or prevention of accidents, whether the cause comes from the collier or the Government inspector, I will point it out.

26932. I only want to know what is your position ?—I am a free lance in that direction.

26933. You stated that examiners ought to examine the percentage of gas at the end of a working place ?—Of each split.

26934. And record the percentage of gas in it ?—Yes.

26935. How can that be done ?—By an ordinary Clowes hydrogen lamp.

26936. That will not give you the percentage ?—It will give us a scale by means of which we can read the percentage.

26937. You will not get much of a result from that ?—I have made some tests and I am satisfied that it is much better than the lamp we use at present. We cannot tell the percentage by the ordinary lamp the firemen use now. It is more or less guess work.

26938. Is it done at all in any mines ?—Yes.

26939. Where ?—Mountain Ash and Merthyr Vale.

26940. They measure the percentage of gas in the air every month ?—Yes, and if it can be done there it can be does elsewhere.

26941. That is recorded in that book. That is not necessarily by the Mines Act ?—No, but it is done in the main return airway of Nixon's Mountain Ash colliery every month.

26942. You said that you had to give a lecture on some point and that you sent out returns for information. Were those returns sent to the colliery owner or to whom ? —I do not think that you have understood my answer. I was asked to give a series of lectures to colliery officials on the cause and prevention of accidents, and the first thing I did naturally was to satisfy myself as to what were really the most prevalent causes. In order to satisfy myself I sent out a series of questions, and I got them answered, and I was convinced to a certain extent as to the causes.

26943. To whom were the returns sent ?—They were sent through the Secretary of the Association to me.

26944. What association ?—The Colliery Examiners' Association. The reason why I did that was this.

26945. What we call the Deputies' Association ?—Not exactly your deputy. These are not the men looking after the timbering.

(*Mr. Smillie.*) The deputies in Durham are the firemen.

26946. (*Sir Lindsay Wood.*) You mean the Firemen's Association ?—I could not get at the men unless I got at them through some Association. I would not know their names for the whole coalfield, so I had to employ the secretary to distribute the questions, otherwise I could not get at the men.

26947. (*Mr. Smillie.*) They were not got through the owners or managers, but through the examiners and the deputies ?—I have them here, perhaps you will understand them better if you see them.

26948. (*Sir Lindsay Wood.*) I did not know whether you got them from the owners themselves ?—No, that would be unfair to the men, because they would not be likely to give those particulars through their superiors.

26949. It is equally unfair to the colliery owners if you get them through the men ?—No.

26950. Why not ?—We do not assume that the men would be untruthful.

26951. Do you think that the owners would be untruthful ?—I believe the men, if they had to send the reports through the owners, would not give me all the information that I wanted.

26952. If you had the reports direct from the owners— ? —I do not believe that they would give me all the information that I wanted. I think that there would be a considerable amount of information I wanted omitted.

26953. (*Mr. Wm. Abraham.*) That information you got is information open to the owners to criticise ?—Yes, here is the whole lot, but I had to promise the men that I

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would keep the names myself, and only hand them to a person in whom I had confidence. I think that explains the position.

26954. (*Sir Lindsay Wood.*) I was not certain whether you got the returns from the workmen or from the owners?—I should not ask the owners; I do not think I should get them.

26955. They are not returns published in the inspectors' Reports?—No, they are published in this (*Producing book*), and open to the world to criticise.

26956. I do not know what you mean by this?—I am sorry, it is supposed to be very good.

26957. What is it?—A series of lectures I delivered.

26958. (*Mr. Wm. Abraham.*) May I put a question to assist you? The managers themselves actually take the chair at your lectures?—Yes, there is no friction in that direction. I got the information directly from the men.

26959. (*Mr. Enoch Edwards.*) You said, in answer to Mr. Abraham, that the firemen when making inspections in the morning where the district was too big, were assisted by the haulier?—Yes, in some cases.

26960. By whose authority does the haulier inspect?—I cannot really take upon myself to answer that question directly, but I know that it is officially known that the haulier does it. He is not appointed by the fireman to do work for which he is responsible, but it is done with the knowledge of the management.

26961. In the first place, who are the firemen appointed by?—By the manager.

26962. He is responsible for the appointment?—Yes.

26963. And their fitness for the office?—Yes.

26964. Does he give any authority to hauliers?—The manager?

26965. Yes?—That is a question involving some doubt.

26966. Could anybody else give authority but the manager?—Not authority.

26967. How do these men come to inspect. How do the hauliers come to inspect at all?—The haulier would be going down possibly for a night shift, and instead of doing straight some hauling work he would, for an hour or less, do inspection work.

26968. He is not a person appointed to do it?—No.

26969. Who is responsible for engaging him in such work?—The fireman is appointed to do that work officially and the fireman makes the report.

26970. There is no authority to delegate that business to a man who has never been appointed to such work?—That I cannot answer, but I know that it is done. Here for instance, in my book I find "Until lately did shot-firing during a shift." "I see to all repairs and proper supply of trams; I am responsible for traffic generally." "I have a haulier to assist me in making the gas examination."

26971 Is that common in South Wales?—No.

26972. You know that it is done?—I know that it is done.

26973. (*Mr. Ratcliffe Ellis.*) In that particular case you mention?—And in the others. This was a case I quoted.

(*Mr. Smillie.*) We had that evidence from an examiner from South Wales last week, that an examiner sometimes had another person with him and sometimes did part of the examination, and he signed for the whole district.

(*Mr. Ratcliffe Ellis.*) He called that man an assistant.

(*Mr. Smillie.*) He calls this an assistant, too.

(*Witness.*) He is a haulier.

26974. (*Mr. Enoch Edwards.*) What is a haulier's work?—To clear out the coal as it is filled, take in the timber and empties.

26975. Does he drive a horse?—Yes.

26976. He does not trim it himself?—Not in the cases I quote. He simply drives the horse.

26977. What is his wage, about?—I cannot tell you. I do not deal with the question of wages.

26978. He fetches the coal from the colliery face?—Yes.

26979. You suggest that he has power to levy tax upon the collier?—I do not say that he levies tax generally, but it is found occasionally that he does get a tip. I do not say that he levies a tax. Possibly it is a voluntary contribution on the part of the collier, and not a levy.

26980. I understood that if he did not pay it he did not get his trams?—That is the indirect way of putting it: where the tip is not given, the collier waits for his trams.

26981. He has the power to levy?—Yes, if he chooses to exercise it.

26982. If he does not pay he does not get trams or timber?—We should not put it quite so broadly as that. There are cases now where the tip not having been given the timber also has not been supplied at the time it was wanted.

26983. I have been in the world a few years, and I never knew of such a thing. That is why I am putting this phase to you. You suggest to us that in the all-important question of timbering being in a man's working place, that this haulier not having any tip will not take the timber?—I do not put it so strong as that.

(*Mr. Smillie.*) He would give the man the first timber.

(*Mr. Ratcliffe Ellis.*) It comes to the same thing.

26984. (*Mr. Enoch Edwards.*) I understood you to say that the collier having failed to pay the haulier his demands, to pay this tip, you call it, 6d., 1s., or 2s. 6d., the other man takes his timber in preference?—That is the point.

26985. The result is that the man does not get his timber when he wants it?—He does not get the first chance.

26986. Does it follow that he is without timber?—It is necessary that he should have timber.

26987. Will it follow because the other man who has given the tip has the timber, that the other man may be wanting timber and it is not there?—It may occur.

26988. (*Mr. Smillie.*) Did you not say that it was a prolific cause of accidents?—I put it forward as a cause of accidents, but I do not think as a prolific cause of accidents. Accidents will arise, and that possibly may become one of the causes.

26989. (*Mr. Enoch Edwards.*) I understood you to suggest that if the man failed to pay his tip, the haulier took care he did not get his tubs or timber as regularly as the man who paid tips. If his timber is not taken to him but to the other man who gives him a tip, it will follow that this man at times wants timber and it is not there?—Yes. I quoted a case in Monmouthshire where the examiner found a man had not a post, and he asked the haulier why, and the haulier said he did not pay his rent last week. Although you could not apply it to every case, yet there is preference given to the man who pays the tip.

26990. In answer to one of the Commissioners you said that was in some cases with the knowledge of the managers?—I can hardly understand the manager of a colliery not knowing the existence of the system.

26991. I think you put it that way, that it was with the knowledge of the manager?—Of necessity.

26992. If it was done there it must have been known. You refer to the Home Office examinations for managers' certificates?—Yes.

26993. For convenience they are fixed in certain centres, more for the convenience of the locality than anything else?—Yes, and to meet the local needs that those who are anxious to become managers in South Wales should sit at the examination at Cardiff or in South Wales.

26994. You do not suggest that a man who has secured a first-class certificate at any of those centres would be incompetent to manage a colliery in South Wales?—No; but I suggest that he should pass the examination intended for his own district.

26995. We were told last week that an English manager had gone to one of your collieries in Monmouthshire, and the first thing he did was to change the shift from 12 hours to eight. That has not been a bad thing for Wales?—I do not know that. That was not Monmouthshire; it was Glamorganshire.

26996. That was not altogether a bad thing for Wales?—I do not know whether the manager changed the shift time or the agent.

26997. They put it since they got this manager there. I am only putting their own case. You rather suggested that a man failing to pass at Cardiff or Swansea went to Manchester because the examination was less stiff than at those places?—I know that he passed in Manchester, having failed at Cardiff.

26998. Supposing he could have had another examination at Cardiff at the same time as he went to Manchester,

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do you think that he would have passed at Cardiff ?—I should not like to say that.

26999. May it not be possible in some one subject that the man was very weak, and by some means he gets to know that is the cause of his failure ?—That is what we want.

27000. In two or three months there is another examination, and if he had an opportunity of going to Cardiff, having improved himself, he might pass there ?—We have some of the published questions, and we see from the standard of requirements that possibly the second in some districts is as hard as the first in others.

27001. You suggest that the mining engineers should not receive premiums from pupils ?—Not that, quite. I suggest that a mining engineer who receives a premium from a pupil should not be the examiner of that pupil.

27002. There are three examiners ?—Yes.

27003. If there were one of them who received a premium from a pupil, what effect do you think that would have upon the other two ?—I would not like to say, because I do not know who the other two would be; but I would make it impossible for the man to be an examiner, to begin with.

27004. Does this happen in Wales ?—That one of the examiners receives premiums from pupils ?

27005. Yes ?—Yes, and I believe that it happens elsewhere.

27006. You think it does ?—I think it does.

27007. You have no proof that it does elsewhere ?—I would not like to speak except for my own district.

27008. Most of us are mixed up with these Boards. Mr. Smillie is on the Board in Scotland, and I am on the Board in Staffordshire, and I do not remember this question being before us. You made reference to a meeting that was held where all the discussion was carried on in Welsh, and the Assistant Inspector understood the Welsh and the Chief Inspector did not ?—Yes.

27009. Did they carry it all on in Welsh because the Chief Inspector did not understand it?—No; for the same reason that I have to lecture in Welsh occasionally.

27010. I have been mixed up with Welsh people a good bit, but I always understand that there is no Welsh talked. —You have not been to Gwaen-cae-Gurwen, Ystalyfera, Ystradgynlais or Cwmtwrch.

27011. It is hardly a case of Welsh for the Welsh ?—No. I believe in Wales for the best.

27012. Am I correct when I say all the demonstrations so far as the Miners' Federation is concerned are conducted in English ?—The best test is this: a member of the Cardiff University College staff, who had to collect subscriptions for the building of our new Mining School, was very greatly annoyed and vexed because he could not make the people understand what he wanted when he begged them to subscribe.

27013. I quite believe that ?—If you want to convert a Welshman you must speak to him in Welsh

27014-5. It is awkward if you are collecting subscriptions ? He may not understand English in that case. I do not understand Welsh, but I address meetings in Wales ?—You only go to the biggest places; the smaller men go to the smaller ones. You have not been to Cwmtwrch or Ystradgynlais or Gwaen-cae-Gurwen.

27016. Some of these people who address your people do not know Welsh themselves? Some of them do not, but in this particular case the men speak Welsh. They speak about "Bwrnel." The inspector would not know what it was, and it came up repeatedly.

27017. I was at an inquest, and the witness insisted on giving evidence in Welsh, but I was thoroughly satisfied that he knew English, and could talk English, because I had a chat with him afterwards; but perhaps having the Welsh interpreted to him gave him more time to feel his feet ?—Perhaps he was anxious to make you comfortable, and show his respect for you.

27018. I was not cross-examining him ?—This Conference was carried on in Welsh because the men more frequently use the language at Gwaen-cae-Gurwen. Ystalyfera, Ystradgynlais and Cwmtwrch. I have to address the men in Welsh sometimes, because they understand me better in that language.

27019. You are quite at home with it ?—No, I prefer English; it is difficult to talk about carburetted hydrogen in Welsh.

27020. (*Mr. Wm. Abraham.*) If you address a meeting in the Rhondda are there not thousands who would understand you better in Welsh than in English ?—Yes, in Treherbert, and other places.

27021. (*Mr. Smillie.*) I understood you to say that the Conference at which the chief inspector did not understand the Welsh was really a conference of miners' delegates ?—Yes, miners' representatives. There were, I think, five of them present.

27022. Were there any who did not understand English ? —They understood English, but they were more conversant with the Welsh. They spoke Welsh in the mine, and at home, and they went to Welsh chapels, and when they wanted to discuss such things as the preparation of squibs and shot-firing, they were more at home in Welsh, and made a special appeal to have the conference conducted in that language.

27023. It was the local officials and not the general officials ?—The Western Division, the anthracite district, the Swansea Valley.

27024. What further examination do you propose that a candidate for a mine manager's certificate who might pass in Manchester should undergo before he became a manager in Wales ? Would it be a *viva voce* examination ?—I would have one general examination.

27025. For the whole country ?—Yes, and one examination suitable to local needs.

27026. What kind of an examination would you have ? —A *viva voce*, or an examination on paper of the methods of working—the methods of working adopted only in the particular district, or peculiar to that district.

27027. Would your suggestion with regard to inspectors, that an inspector having a knowledge of the Welsh language should be preferred, also refer to a colliery manager ?—Yes, because when a Welsh colliery manager gets angry he invariably speaks in Welsh.

27028. There are localisms in every district, practically ? —Yes.

27029. In Scotland we use terms which are absolutely different from what they are in the North of England, or the Midlands, or in Wales. A colliery manager, who might be a good colliery manager in Wales, it may be suggested, would not be employed in Scotland until he had gone through an examination on those local terms. Would you go that length ?—No. A man may be successful in the North of England, and be transferred to South Wales and be successful; or he may be a successful manager in Scotland, and be transferred to the South of Wales and be a successful manager for many reasons. I would not consider it necessary to examine that man, but at the start, when the man sits for the examination qualifying him to become a manager in South Wales, I think he should know the Special Rules and all subjects relating to that district.

27030. There have been a number of very successful Englishmen and Scotsmen who went to South Wales ?—Yes, and a number of successful Welshmen who have gone north.

27031. Who have been successful when they have gone north ?—Yes.

27032. We have a mines inspector there who can speak Welsh ?—Yes, they speak English and Welsh.

27033. At least, so Mr. Abraham tells me—I do not know myself. I am particularly interested in the question of instruction of children in the mining districts. I understood you to say that the children under 14 still attending school were taken to the mines and down the mines ?—They are taken to the mines as school children and taken down the mines immediately they become members of the evening continuation school.

27034. They may be employed underground at that age, so far as age is concerned ?—Yes.

27035. You do not take them underground ?—Direct from the school ?

27036. So long as attending day school under 14 years of age ?—No, we take them to the colliery and to the lamp-room and so on. From the evening continuation school, where we have an expert as teacher, we take them underground.

27037. It is a very great concern to me that children should get some knowledge, even during their elementary training, of mining, and the nature of gases and other things. Is there any general instruction given in the schools in Wales in that direction ? Is it a part of the curriculum of the school or provided for in the time-table ? Is time set apart for giving the lads any instruction in those matters ?—In Glamorganshire we make it part and

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parcel of the syllabus in the 5th or 6th Standard, I mean that standard before the boys go to work. We go a step further and have made a promise to all the teachers qualified to give such instruction, that in cases of promotion they shall receive preference.

27038. You have no Government grant for that?—Yes, it comes in under what we call general object lessons. They are permitted to give a certain number of general object lessons in the year, and we hold that six should bear on mining matters. We recommend that lessons on the following subjects should be given:—"(*a*) Coal, and how it is formed. (*b*) Coalmine gases and how they become dangerous. (*c*) The safety lamp and how to use it. (*d*) How a colliery is ventilated. (*e*) How the coal is worked in the mine. (*f*) Rules framed for the miner's safety." That is referred to in the Report of the tours of mining students under the Glamorgan County Council.

27039. Do you think these lessons once a year would be of very much advantage? Do you think that educational authorities should insist on that being a part of the training of miners' children and that there should be at least two lessons a week? Do you think that would be a wise course?—No, you would get the teachers up in arms. You have to move very delicately to prevent obstruction on the part of the teachers. If they give six lessons in the year in this direction and give a boy a certificate, not on examination, but if he intelligently reproduces the substance of the lessons given. When he goes to look for work if he has this certificate and is able to say, "I know about the safety lamp. I know about the Special Rules as used underground," I think it would be an advantage.

27040. Where the Government makes up its mind in the interests of a large industrial body in this country to do anything, do you think that we should pay any attention to whether the teachers get up in arms or not. Is it a good thing to teach the children something about the employment they are going to in the interests of safety?—I hold it is more important that a boy should learn something about the safety lamp than the length of the Thames or the depth of the Mississippi.

27041. (*Dr. Haldane.*) Is it practicable? I do not think there is any doubt about it being desirable?—It is practicable as far as those six lessons are concerned, but if you made it compulsory twice a week, it would have to take the place of some other subject. Now it can be woven in as part of science and the teachers are delighted with it; but if you thrust it upon them and said, "This is part and parcel of the school curriculum," they would say, "What subject are we to drop?"

27042. (*Mr. Smillie.*) It does not work out in that way, because in the board schools under our School Board, of which I was a member for 18 years, we introduced it, and there was one hour's teaching every Friday on mines and gas in mines and their nature, and the teachers were delighted, and the mines inspector examined 120 boys once a year—from 120 to 150—and prizes were given. It was the principle I was referring to, because I think sufficient attention has not been paid to the subject up to the present time?—I agree.

27043. With regard to the cap on the lamp, from your experience in Wales amongst mines' managers, do the managers consider a cap shown on an ordinary safety or examiner's lamp dangerous?—Yes. I think, generally, it is recognised that immediately a cap is seen the men should go out.

27044. Has that been the general expression of opinion amongst Welsh mine managers?—That I would not like to say; but last week a man was found by an official working in a place where a blue cap presented itself and was ordered out; he was blamed for not having gone out earlier, since there were signs of firedamp present.

27045. Supposing you got a cap a quarter of an inch long, would it be considered dangerous?—I believe any sign of cap at all on an ordinary safety lamp shows danger.

27046. (*Dr. Haldane.*) Have you ever gone round testing the air yourself at the end of a split?—Yes.

27047. In any of the Rhondda Valley collieries did you ever find a colliery where there was not a blue cap on the flame at the end of the split?—I would not say that I did, but that does not remove the point I am aiming at, that the air should be measured there and the blue cap recorded. I believe the fact that they are bound to record that blue cap will make it seldom found in the future. If better attention were paid, I believe the cap would not be seen so often.

27048. (*Mr. Smillie.*) You said "Yes" in answer to my question, "Did the managers of mines in South Wales believe generally that a cap was dangerous?"—I know men are sent out if a blue cap does appear.

27049. Are you aware that an explosion took place at MacLaren Colliery at Abertysswg?—Yes.

27050. And that the mines inspector gave evidence that he had called twice and tested the air, and called the attention of the mine manager to a dangerous cap for 500 yards in the aircourse?—Yes.

27051. Are you aware that three managers gave evidence at the inquest and all stated that a cap in the lamp was not at all dangerous, and that they would not withdraw the men?—That was at the inquest.

27052. If three skilled men who are at present managers in Wales give an opinion that they would not withdraw the men where a cap was shown on the lamp, do you still hold that colliery managers in South Wales think a cap is dangerous?—The men are sent out when a cap does appear.

27053. Those three colliery managers said they would not?—It was a question of opinion as to what really constituted a danger.

27054. The Government has that Report in which it is stated that those managers would not withdraw the men where the cap was shown?—Yes.

27055. Even when the mines inspector instructed them that there was danger?—As a result of that enquiry it is assumed, wherever a cap presents itself, that it is a proof of inadequate ventilation. The whole question came about as the result of that enquiry, and to-day it is acknowledged that a blue cap is a sign of inadequate ventilation. Before that it was not recognised as such.

Mr. THOMAS HUGHES, called and examined.

Mr. Thomas Hughes.

27056. (*Chairman.*) You are a collier in North Wales?—Yes.

27059. Where at?—At Bersham Colliery.

27060-3. Do you wish to say something to the Commission about propping?—Yes, and a little bit more.

27064. (*Mr. Ratcliffe Ellis.*) Will you say what you want to say?—In the first place we thoroughly believe that the time has arrived—and it ought to have been before—that we ought to have had a chief inspector residing in Wales, and that he should be a Welshman.

27065. (*Mr. Smillie.*) In North Wales?—Yes.

27066. (*Mr. Ratcliffe Ellis.*) Your present inspector is Mr. Hall?—Yes.

27067. Mr. Matthew, the assistant inspector, is a Welshman?—Yes; but Mr. Hall is the responsible person, and he lives in another county.

27068. You think that you ought to have a chief inspector for North Wales, who ought to be a Welshman?—Yes, residing in North Wales.

27069. That he should be a Welshman and speak Welsh?—Yes.

27070. What is your next suggestion?—In drawing up the Special Rules we think that we ought to have the privilege of co-operating with the employers in drawing out Special Rules, because it affects both parties and is something similar.

27071. What is your next point?—With regard to propping. We believe that in every seam that is over 4 feet all straps should be set, and not single props.

27072. What do you say should be done?—Set the straps instead of single props acting—small bars.

27073. Two props underneath, and a bar at the top?—Yes.

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27074. So that the roof should not be dependent on the prop but a bar, and these props to support the bar ?—Yes.

27075. Do you think that should be done ?—Yes, in every seam of coal that is over 4 feet.

27076. What is the next point ?—Spragging is general through our district, but they do not send or make sprags for us. We have to make our own.

27077. That is a question rather of the management ?—Yes.

27078. You have to sprag according to the Act of Parliament ?—We have to make them as well.

27079. Do you object to making them ?—Yes, unless we are paid for them.

27080. That is a question of wages rather than a question of safety. The sprags have to be put in ; but your objection is that you have to make them ?—It bears very much on safety.

27081. You say that the employers ought to supply them to you, or pay you for making them ?—Yes.

27082. What is the next point ?—The next is the packing. The packs are not properly made up, because they are not paid for.

27083. You are required to do packing, which you are not paid for ?—That is the reason that the roads are so bad in 150 yards along the face, where the whole of the accidents happen in the mine.

27084. Is it part of your arrangement now that you have to do packing ?—No.

27085. Do you do the packing ?—Yes.

27086. Why do you do it ?—It is a part of our contract to put all our dirt that is coming from the coal on top or underneath, and not to do any more.

27087. Are you required to do more than that ?—It will be safer for the men and the boys if there were proper packing.

27088. It would be safer if the packing was not left to the collier : but either the collier was paid for doing something more than he does, or somebody else did it ?—Yes. I think that there should be proper packing, and if there was it would be safer for the boys.

27089. It is not properly packed ?—No. He is not paid for it.

27090. Your complaint is that at present it is not properly packed ?—Yes.

27091. If some addition was made to the collier's wages he would pack it properly ?—Yes.

27092. What is the next point ?—In regard to haulage, we feel that a great many accidents happen in our district through the roof, being too low for the trammers. We have many trammers in our district, and there are no handles or anything to defend their hands, and that the coal catches them.

27093. On the wagons ?—Yes.

27094. You think there ought to be a guard ?—I think there ought to be some handle with them so that they can take their hand off the top.

27095. To protect the hand where the roof is low ?—Yes.

27096. What is the next thing ?—There is nothing else.

27097. Is that all ?—Yes.

27098. (*Mr. Enoch Edwards.*) Your district has about 10,000 men ?—Yes, between 10,000 and 12,000, top and bottom.

27099. You are in what they call the Liverpool district of inspection ?—Yes.

27100. Does the assistant reside in Wales ?—No, he resides in Cheshire.

27101. You think there is sufficient work for a responsible inspector in North Wales alone ?—Yes.

27102. There are 10,000 men there, and it has always formed part of the Liverpool district. I suppose they undertake the quarries there, too ?

(*Mr. Ratcliffe Ellis.*) Yes.

27103. (*Mr. Enoch Edwards.*) Your point is that it should be made a district of itself for a chief inspector who can speak Welsh ?—Yes.

27104. What do you mean by about 4 feet thick ? Have you had much experience of mines outside North Wales ?—Yes.

27105. You suggest, where the coal is 4 feet thick, that all the timber should be up to the face ?—Over 4 feet thick.

27106. First of all, do you work longwall ?—Yes.

27107. Is the roof of such a nature that it is necessary to carry props and bars along the face ?—Yes.

27108. Are you aware in many seams in the country that is not necessary at all ? It is not necessary to timber clean up to the face ?—Yes.

27109. You suggest here that it should be made compulsory ?—We are compelled under our rules to do it, whether we want to or not.

27110. There is considerable labour in setting timber bars and legs ?—Yes. In all the seams over 4 ft. we are taking the tubs along the face in longwall work. This systematic timbering causes a lot of trouble, and is not so safe.

27111. Your point is that bars should be made compulsory. That involves a contract ?—Yes.

27112. Your contract will include the setting of these timbers—I mean your present contract ?—No.

27113. You are paid extra for it ?—When we set bars we are paid for it.

27114. You are not paid for props ?—No.

27115. If you are putting bars on top of props you will be paid for it ?—Yes.

27116. For props alone you are not paid ?—No.

27117. Do you think it much safer to set bars ?—Yes.

27118. That is not the general experience in the country. From your experience, as applied to your seam, that should be so ?—Where you are working the seam at 5 ft. you cannot see the slips. It is not so visible.

27119. Except in practice they do not do it. You have been at it a great many years ?—Yes.

27120. There have been Special Rules drafted several times ?—Yes.

27121. Have they ever asked your Union about it or your officials ?—No.

27122. They have never consulted you at all ?—No, only they set a notice up, if any individual has an objection.

27123. They never meet you in conference to discuss them ?—No.

27124. That is rather the fault of the inspector ?—We met on the General Rules once or twice in my experience.

27125. The inspector would be the person responsible for getting a joint meeting of you and the employers. You think in any Special Rules that are drawn up the men should be consulted with the owners ?—Yes, and take part in it before they are signed.

27126. Mr. Ellis raises no objection to that as far as I can see. With regard to the question of lids to timber, you have to make your own in the pit ?—Yes.

27127. It would be easier to make them on the top ?—Yes.

27128. You would have better tools there to make them with ?—Yes, and more time to set them. When he has to make them and set them it takes his earnings away.

27129. It is a question of whether they have the proper appliances to make them or leave you to make them. You think they could be made better at the top. You ask while they have to send in timber under the rules that they should also send in lids properly shaped ?—Yes.

27130. I gather that you do not pack your working face along ?—I consider on the side it should be packed to make the road safe, that is 50 yards from the face. That is where the accidents happen from falls from side and top.

27131. Largely, where you work longwall by contract, they have an inclusive price which includes ripping the top and packing. The workmen are responsible for the packing ?—They are only responsible as far as the dirt on the face. There might be some under the coal or in the coal. They are not responsible to go back into the waste to pack.

27132. You are referring to your custom in Wales ?—Yes.

27133. As they clean the coal they are supposed to pack the waste in longwall work ?—Yes.

27134. The nearer you can bring it up to the face the better ?—Yes.

27135. Have you much difficulty with these low roads ? You say that the roads are very low. Do they ever rip the roads at all to make them a proper height ?—Yes.

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Mr. Thomas Hughes.

10 July, 1907

27136. In time they get low ?—Yes.

27137. The lads and hauliers with their hands on the top get trapped ?—Yes.

27138. Do you have many boys with their fingers cut ?—Yes.

27139. You think that should be obviated by handles just below the top ?—Yes.

27140. What do you actually do with regard to the packing. You say the packing is not properly done ?—Yes.

27141. Will you tell us how it is done ?—It is not properly packed up to the roof, the dirt is not thrown into the walls. They make the walls here and do not give half a yard from the top. That is giving the road the chance of weighing in.

27142. Who is to blame for not doing that. On whom do you put the blame for that, is it the collier ? Does he not do what he ought to do, or does not the management do it ?—I cannot say.

27143. I understood from you that the price you are paid includes throwing the dirt back into the wall and filling up, but not a tight packing ?—Yes, it is in the coal on top or under the coal ; we put that in the pack. When that is not sufficient, and that is the general rule, the pack is left half made. We advocate that the mine ought to be properly packed for the safety of the men.

27144. (*Mr. Smillie.*) There is not sufficient stuff now to pack it ?—No, we think it should be properly packed, whether he should do it for nothing or be paid for it.

27145. (*Mr. F. L. Davis.*) Your point is that there is not enough dirt and stuff for you to properly pack ?—Not as a rule.

27146. They do not send any in to you ?—Yes, at nights.

27147. But it is not sufficient ?—No.

27148. (*Mr. Wm. Abraham.*) There is no more payment in your contract for packing than simply throwing the dirt in working the coal into the gob ?—That is all.

27149. Your complaint is that there is not sufficient care being taken to fill the place up ?—Our opinion is, if places were properly packed that the roads would be much safer for the lads ?

27150. And there would be no room for gas to lurk in either ?—I do not know about that. As a rule we are keeping six, or seven, or eight yards on the waste. If you move gas from here it will be there.

27151. Have you any gas there ?—Yes, occasionally.

27152. A road well packed would be a safeguard against an accumulation of gas ?—Yes.

27153. As well as extra safety for the top ?—Yes.

27154. Your complaint is that the packing is not being done sufficiently well to give you that protection from a fall of roof or from an accumulation of gas ?—Yes, also that the coals would be better, too.

27155. That is a question of management. It is a question of safety that we are here upon. What point from the working face do you get your timber ?—As a rule they come in. In a great number of instances we have them from the next shunt to the face or flat, as we call it in North Wales, or pass-bye. The roads are too low to put the props on the top of the tubs, and we have to go to the pass-bye for them.

27156. Have you to carry sprags ?—We are making the sprags from our timber. If we have old ones we cut new ones to make the sprags.

27157. I do not understand what you mean ?—We are making the sprags out of old props, and if we have not old props we have to make sprags out of new ones.

27158. Have you to carry that timber to make the sprags from the pass-bye ?—Yes, in many instances, but where they can come in they send them in.

27159. Is it a question of payment for putting up, or is it a question of the necessity of flats, or is it a question as regards safety ?—It is a question of safety, and safety alone.

27160. You think, in order to give you the required safety, that you could have flats put up and not props ?—Yes.

27161. (*Mr. Smillie.*) Let us get at the question of the flats. You say in the workings at 4 ft. high you take your tub along the face right up the longwall ?—Yes.

27162. That will leave a space between your props and the coal face of, perhaps, 3 ft. ?—No, it will leave 1 ft. to half a yard.

27163. Can you take up a tub in one flat ?—No, here are the two props, and the bars will be 6 ft. (*indicating*).

27164. That is your present position without the bars. If you take your tub along the coal face just now and you are only setting props there will be a space between the props and the coal face ?—Yes.

27165. You propose that the bars should be over the top of the tub, so that a stone cannot fall down as it can now ?—Yes.

27166. Where the roof is bad it might be necessary to put the end of the bar over the coal and a prop in at the other end ?—We generally have that privilege by a manager or a fireman. You must have a bar here or else it would be dangerous. He would not allow us to put the bars systematically in about 3 ft. to one another along the wall because he has to pay for it, but our experience is that it would be much safer, and we are arguing for safety.

27167. What is your present systematic timbering ?—5 ft. from each other.

27168. That is the distance the props are ?—Yes.

27169. The men are of opinion if it were made compulsory to have bars over 3 or 4 ft. that that would tend to greater safety ?—Yes.

27170. Because sometimes a stone falls out from a slip without giving warning ?—Yes.

27171. In the space between the props and the coal face ?—Yes.

27172. Of course it would be only a question of arrangement for payment for putting up those bars if it were made compulsory to have the bars ?—Yes.

27173. Why in seams over 4 ft. ? You might have just as bad a roof in 3 ft. as in 4 ft. ?—Yes.

27174. Why do you propose in over 4 ft. ?—It would be impossible to set a bar in 4 ft., and take the tub there, because it would be too low.

27175. You do not take the tubs up the face ?—Yes.

27176. Not in the 3 ft. ?—In 4 ft. and 3 ft. 6.

27177. You might have some 2½ ft. Why not have the bars there ? You do not take the tubs up the face ?—It would be too low for the bars.

27178. It has to be done now in many cases. Where the roof is bad bars have to be put in over the top of the coal head and one end of the bar put in there and the other end of the prop put to it. That has to be done in thin seams. You would not object to that being done in any place where the roof is bad ?—No, but I am speaking now for my own district alone.

27179. Are all the seams in your district over 4 ft. ? —Only a few seams ; as a rule they are 5 and 6 and 7 ft.

27180. They are nearly all over 4 ft. ?—Yes.

27181. Are your main roads at the present time sufficiently high ?—No.

27182. Do you rip them ?—Yes.

27183. Does the miner do his own ripping ?—Yes.

27184. The man who has charge of the place ?—Yes.

27185. That is a separate price ?—That is a contract.

27186. Is he not expected to pack his place with what comes out of the ripping ?—Yes.

27187. Is there not sufficient with the ripping to pack the place ?—Yes.

27188. Do you suggest that rubbish should be sent in, or that the places should be packed partly with timber ? —Our argument is that the mine ought to be better packed, because we think that it would be safer for the boys and the men.

27189. In order to prevent the roof coming down. You think it would not, if properly packed, come down as far as it does just now ?—Yes.

27190. You do not care what the method is as long as it is properly packed ?—We have the method, but it is not carried out.

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THIRTY-NINTH DAY.

Tuesday, 16th July, 1907.

PRESENT:

Lord MONKSWELL (*Chairman*).

WM. ABRAHAM, Esq., M.P. (Rhondda).
F. L. DAVIS, Esq.
THOMAS RATCLIFFE ELLIS, Esq.
ROBERT SMILLIE, Esq.
S. W. HARRIS, Esq. (*Secretary*).

Mr. WILLIAM GRIFFITHS, called and examined.

Mr. W. Griffiths.

16 July, 1907

STATEMENT OF WITNESS.

27191. (1) *Lamps.*—I believe that if the double gauze lamps could be so constructed as to give proper and sufficient light in the ordinary air currents underground, and with the heat of the underground workings, they should be generally adopted in preference to single gauze lamps.

(2) *Accidents.*—I believe that the present regulations as to shot firing, if strictly adhered to, are sufficient; but as an additional precaution I would suggest that all holes should be charged by a competent official appointed by the colliery company. Accidents arising from falls could be minimised by a more regular attendance of men at their work. I also think that there should be a system in operation in the coal field, whereby every company could ascertain whether every workman, upon being given employment, was competent in whatever department of mining he had been engaged in.

(3) *Rescue Facilities.*—No fixed special provision can be adopted for all collieries, as rarely are the conditions and results of any two accidents alike.

(4) *Accident Enquiries.*—I can suggest no improvement on the present method of investigation into cases of accident.

(5) *Ventilation.*—No definite standard of ventilation can be laid down as being applicable to all collieries, as the ventilation must differ with the varying nature of the seams, also with the depths of the seams, while it is known that one system of ventilation is not applicable to two districts in the same seam.

(6) *Special Rules, etc.*—I consider the present system of Special Rules adequate, but if they were drafted in a more condensed form, it would be of assistance to both workmen and officials. Every workman should be made to learn the chief provisions of the Coal Mines Regulation Act before being employed; I also think that the Act or a part of it, should be included among the subjects set in the labour examinations in our schools, thus making certain that when boys start work underground, they have a special knowledge of the dangers attending their occupations.

27192. (*Chairman.*) You are a night overman in the employ of the Cambrian Collieries, Clydach Vale, and have worked underground for 40 years, 19 as a workman and 21 years in different official positions. Have you ever been outside the Cambrian Collieries?—Yes, I have been at Mountain Ash in Powell-Duffryn Colliery, Nixon's, and at Wattstown in Ferndale.

27193. You have had a good deal of experience in South Wales collieries, but not elsewhere?—Yes.

27194. What were the different official positions you occupied?—From fireman up to overman.

27195. You began as fireman and became an overman?—Yes.

27196. How long have you been an overman?—I have been about 16 years.

27197. When you began your experience as a fireman did you consider that the district that you served was more than you could properly manage?—No, not at the time.

27198. You never complained, as a fireman, of having too large a district?—No.

27199. You were able to do all the duties of fireman in your district without being overworked?—Yes.

27200. With regard to your position as an overman, do you consider that you have more work than you can do properly?—No.

27201. What is your duty as an overman?—To examine the workings and see that everything is carried on in working order and in safety.

27202. You are not like a fireman, chiefly concerned with the safety of the miners; you have, as overman, to carry into effect the instructions of the manager or undermanager, and to see to the working of the mine?—Yes.

27203. I see among other duties: "He shall direct that timbers are set in the best manner in all places where they are required, and shall take care these instructions are obeyed." Do you find any difficulty in carrying those instructions into effect? Do you find that the men are desirous of setting their own timber and do not like to be interfered with?—No, I cannot complain of the men.

27204. They are quite ready to fall in with your directions with regard to setting timber?—Yes; I have always found them so.

27205. Do your duties overlap the duties of firemen at all? Do you and the firemen have, to some extent, the same duties to perform?—I have to go through every working place: the fireman goes through once a day,

27206. I mean an examiner when I say a fireman?—Yes.

27207. I see one of your duties is to examine every working place once during the shift?—Yes.

27208. Before the shift the working places are examined by the examiner?—By the fireman.

27209. Notwithstanding that examination before the shift, you have to go round during the shift and examine every working place?—Yes.

27210. You have something to tell us about lamps. You consider that double gauze lamps are safer than single gauze lamps?—Yes.

27211. And should be generally adopted in preference. Of course, the difficulty arises in this way: double gauze lamps do not give nearly as much light as the single gauze lamps?—They are confined too much.

27212. Supposing you had a lamp that gives a better light, if you cover it with double gauze it would certainly give less light than a single gauze lamp?—Yes.

27213. So that you have to balance one consideration against another?—Yes.

27214. You are decidedly of opinion that where it is practicable that a double gauze lamp should be used if sufficient light can be got out of it?—Yes.

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Mr. W. Griffiths.

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27215. Have you anything to go upon when you say that? Have you any statistics as to accidents that you believe have been caused by lamps only having a single gauze?—No.

27216. What is the proportion of double and single gauze lamps employed in the collieries you have worked in?—Where do you mean?

27217. Do you think that more single gauze lamps or double gauze lamps are used in the mines you know?—More single gauze lamps.

27218. Have you anything to say as to accidents which have happened in cases where double gauze lamps have been used, and cases where single gauze lamps have been used? Do you think more accidents have happened where single gauze lamps are used?—My opinion of the double gauze lamp is that it will go out quicker in gas. It is not possible for that lamp to explode.

27219. Have you known instances of an explosion in the case of single gauze lamps where if double gauze lamps had been employed there would have been no explosion?—We would save a good many of them, I daresay.

27220. You would save many an explosion?—Yes.

27221. Then with regard to shot-firing, you suggest as an additional precaution that all holes should be charged by a competent official appointed by the colliery company. What is the usual practice in your mines?—We charge our own holes.

27222. Every collier?—Every official. We keep an official at our colliery.

27223. The officials do charge the holes in your colliery?—Yes.

27224. You know that in other places they do not?—Yes.

27225. You want that rule to be made obligatory?—Yes.

27226. That is the practice that obtains in your colliery?—Yes.

27227. You say that accidents arising from falls could be minimised by a more regular attendance of men at their work. What do you attribute that irregular attendance to? Is it to a desire on the part of the men not to do more than a certain number of days' work in the week, or to any action of the managers in restricting the output?—We want regular working.

27228. You consider it is a great pity that the men should not work regularly?—Yes.

27229. Whenever they can do so?—Yes.

27230. You go on to say that there should be a system in operation in the coalfield whereby every company could ascertain whether every workman upon being given employment was competent in whatever department of mining he had been engaged in. That would be very desirable if it could be carried into effect. I suppose in their own interests managers would see a man was a competent miner as far as they could?—I do not know. I do not see how they could refuse a paper to a man when he was leaving the colliery to go elsewhere to work.

27231. So that you mean where a man is practically discharged for being incompetent the manager is kind-hearted enough to give him a certificate to get employment elsewhere, although not very competent?—There are a good many of our men travelling who will be assistant timbermen first. They will go to the next colliery in a few months before they have properly learned timbering, and ask for work at timbering, and say they have been timbering at the Cambrian Collieries or elsewhere. They will get a place and perhaps get killed.

27232. If a man seeks employment as a timberer in another mine, I suppose the man he goes to would demand some security that he knows about it?—That is what I want.

27233. You would like every manager or under-manager to state in the certificate that he gives to the workmen who leave his mine, exactly what their qualifications are?—Yes.

27234. Now he says he has worked so long as a timberer?—Yes.

27235. I rather understood, from reading the notes of your evidence, that when a man left the colliery to get work elsewhere you were in favour of the colliery which had employed him stating in detail what qualifications he possessed, but I understand from Mr. Abraham what you want is this, not that the man under whom he was employed should be bound to give him a detailed statement as to his competency, but that he should be examined in some way as to his competency?—Yes.

27236. A sort of public examination?—Yes.

(*Mr. Wm. Abraham.*) He says a system in operation in the coalfield.

27237. (*Chairman.*) Whereby every company could ascertain whether every workman was competent. The system you suggest is a system of public examination?—Yes.

27238. As to rescue facilities, you say that no fixed special provision can be adopted for all collieries, as rarely are the conditions and results of any two accidents alike. I do not think it quite follows because the conditions and results of no two accidents are alike that there may not be a general system laid down for having rescue facilities in mines that might be useful in almost every kind of accident. Then you can suggest no improvement on the present method of investigation into the cause of accidents?—No.

27239. You are quite satisfied with the verdict and the evidence produced at coroner's inquests?—Yes, I am.

27240. With regard to ventilation, you say that no definite standard of ventilation can be laid down as being applicable to all collieries, as the ventilation must differ with the varying nature of seams, also with the depth of the seams, while it is known that one system of ventilation is not applicable to two districts in the same seam. I rather gather from that view of yours that you think that General Rule No. 1 is about as far as you can get?—Yes.

27241. You are satisfied with General Rule 1. Then with regard to the Special Rules, you consider the present system of Special Rules adequate. What do you mean by the present system of Special Rules? Do you mean the Special Rules themselves as they are enforced in your district, or that the system of setting them up is, in your opinion, an adequate system?—The system of setting them up.

27242. You are satisfied with the present method of setting up Special Rules, that is to say, as I understand it, that the manager, on behalf of the owner, will put forward a certain rule which the men may, if they like, take exception to, and these Special Rules are sent to the Home Office before they are established. You are satisfied that it is not necessary that the men should be consulted previous to the mine owners having committed themselves to certain Special Rules. Now the mine owner puts forward certain Special Rules, and he is committed to those rules, to a certain extent, before he consults the men at all. It has been suggested that the men might be consulted before the mine owner had come to any definite conclusion with regard to the rules. He might say to the men, "I think it desirable that certain Special Rules should be promulgated, but I should like to hear your opinion before I send them to the Home Office for approval?—I should like each man to have a Special Rule put into his hand when he is employed.

27243. I understand that you are satisfied with the present system of setting them up; the only criticism you make with regard to the Special Rules is that you think they should be printed in a more condensed form?—Yes.

27244. You think they are too long?—Yes.

27245. Too elaborate?—Too many words.

27246. You think that the gist of these rules, the kernel of them, as it were, could be put in much simpler and shorter language?—Yes.

27247. You suggest that every workman should be made to learn the chief provisions of the Coal Mines Regulation Act before being employed. You would have some examination. Would you suggest that the under-manager or somebody else should be bound to give every workman a certificate that he knew the Coal Mines Regulation Act before he was allowed to go underground?—No, I do not think I would do that; I would give him the Special Rules for him to keep and read himself and learn before he goes on.

27248. Do you suggest the management should tell the men it was very important that they should know the Coal Mines Regulation Act?—Yes.

27249. If the men do not choose after that warning to take the trouble to learn the Act, you would leave it there?—Yes.

27250. Then you think that the Act, or a part of it, should be included among the subjects set in the labour examinations in our schools. What do you mean by "the labour examinations"?—I mean that would be a great help.

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27251. What do you mean by "the labour examinations"; I do not understand the phrase "the labour examinations"?—The Coal Mines Regulation Act ought to be read in school during a part of the last year that the boys are in that school. That is my meaning.

27252. You would have the Coal Mines Regulation Act as a special subject?—Yes.

27253. You would call it a special labour subject?—Yes.

27254. This special subject, namely, the provisions of the Coal Mines Regulation Act, to be taught to a boy in the last year he was at school?—Yes.

27255. Would you suggest that he should not be allowed to work underground until he had passed an examination showing that he had mastered the provisions of the Coal Mines Regulation Act?—Yes.

27256. (*Mr. Ratcliffe Ellis.*) Do you think that the irregular attendance of the men is a cause of accident?—Yes.

27257. Do you mean leaving the place for some time without anybody in it?—Yes.

27258. So that when the collier is not at work there is no person working in his place, and therefore it does not get that attention it would if the man was engaged in it. That is what you mean?—Yes.

27259. Can you suggest any way by which men could be induced to attend more regularly to their work?—Well I do not know. There is a lot of it, but of course when you are losing work from sickness, you cannot help it.

27260. That is not the usual cause of absence?—There is more loss of work without sickness.

27261. You cannot suggest that the employers can do anything?—No.

27262. It must be a movement among the men themselves to get more regular attendance?—Yes.

27263. Who sets the timber with you?—The timberman.

27264. In the working places?—Each timberman repairs his own road in the face.

27265. Who sets the timber in the working places?—The collier.

27266. Do you think he is the proper person to do that?—If he is not the proper person we put one there to assist him.

27267. The collier does the timbering in his working place?—Yes.

27268. Do you think he is the best man to do that?—Yes.

27269. He knows better than anybody else how to protect himself in his working place?—Yes, if he is a competent person.

27270. In the roads the timberman does it?—Yes, on the repairing roads.

27271. You do not find fault with that arrangement?—No.

27272. With regard to the charging of shots at your colliery, the official charges the shots?—We always keep a shotman on purpose for it.

27273. Both to charge the shots and to fire the shots?—Yes.

27274. The collier drills the holes?—Yes.

27275. That is his business; and then when the shot-lighter goes he sees that the hole is properly drilled before he puts the charge in?—Yes.

27276. That is an advantage?—Yes.

27277. You think that is a good thing?—Yes.

27278. You are speaking of shots in the coal now?—We do no shot-firing in the coal.

27279. Are you speaking of the shot-firing in the roadways?—Yes, in the roof and sides.

27280. Is it usual in other collieries for that to be done by the man who is repairing the road?—Yes.

27281. And not by the shot-firer?—No.

27282. Would you approve a regulation that no shots should be fired in the roads except under the direction of the manager?—Under the direction of the shotman.

27283. I am going above the shot-lighter, I mean the manager?—Yes.

27284. Would you approve a regulation that the manager must direct any firing in the roads?—Yes

27285. The shotman would carry it out subject to the direction of the manager?—Yes. The manager has to make a report that such a road is to be fired in before the shotman can do it now.

27286. Is that the case in your colliery?—Yes.

27287. Is that generally so?—At our colliery.

27288. (*Mr. Wm. Abraham.*) Do you say in your colliery no shot is fired in the main roads except under the direction of the manager?—Yes; he must make a report on the book before the shot fireman can fire it—that a shot is to be fired in such a place.

27289. (*Mr. Ratcliffe Ellis.*) Have you ever been a shot fireman yourself?—I have fired shots when I was a fireman.

27290. Is there any regulation as to how soon after a shot has been fired they may go into the place where it has been fired?—No, the shotman goes back to see the hole is all right, and then the men can go in at once.

27291. The men working on the roads?—Yes, but we are firing between shifts.

27292. Do you fire more than one shot at a time?—No.

27293. What interval of time do you allow between the firing of one shot and another?—Five or ten minutes if close to one another.

27294. Do you think that is enough time to allow?—Yes.

27295. (*Chairman.*) You represent the South Wales Colliery Officials' Association?—Yes.

27296. Numbering about 230 men?—Yes.

27297. Do I understand that you placed before this Association the notes of what you are going to say here? Do they know what you are going to say here?—They know part of it.

27298. You know sufficient of their views to be able to assure the Commission that what you state is in the main the views of your Association?—Yes.

27299. I was rather astonished to hear you tell Mr. Ellis that you thought the collier the best man to set up the timbers, because the Special Rules say that you yourself (I have already directed your attention to it) shall direct that the timbers are set in the best manner in all places where they are required, and shall take care these directions are obeyed?—Yes, by my direction they are putting the timber up.

27300. You are the person to direct the collier?—Yes.

27301. You know more about the timber than the ordinary hewer?—Of course.

(*Mr. Wm. Abraham.*) He believes that the hewer himself should be so practical in every case that he would be able to put up the timber properly, but because they are not he has to direct them.

27302. (*Chairman.*) You mean the hewer ought to be better instructed in the art of putting up timber than he is at present?—Yes.

27303. At present he is not so well instructed as he ought to be; you have to give him directions, and you think that a wrong system?—I do not think that is a wrong system. I quite agree that I should give instructions to the men to put up the timber if they are putting it wrongly. I tell them that they must alter it.

27304. What you object to in the present state of things is that the ordinary hewer does not know enough about setting timber, and ought to know more?—Yes.

27305. (*Mr. Wm. Abraham.*) As a rule, the Welsh collier is a good timberer?—Yes.

27306. But there are cases in which unskilled men are engaged, and you cannot trust them to put up timber because they do not know the way to do it?—Yes.

27307. Your desire is that everyone engaged as a coal hewer should be competent?—Yes.

27308. That is why you ask that he should have some certificate to prove that competency?—Yes.

27309-12. You have no objection to the fireman or overman having the responsibility of directing everybody, competent as well as incompetent, where they find it necessary?—Oh dear no. I quite agree that the overman and fireman should direct the timbering, to teach those men.

27313. You said in your opinion that you had not too much to do?—No.

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27314. You are quite able to do all the duties set out to you?—Yes.

27315. How many hours do you work in the day?—We work from 7 o'clock till 4.30.

27316. When are you found at the colliery in the morning?—I am there to see the men starting to go down at 6 o'clock.

27317. You are there at 7 o'clock?—Yes.

27318. That is not 6 o'clock. You are there throughout the hours of working?—Yes.

27319. When do you finish?—4.30 to 5.

27320. Do all the men come up before you leave?—Sometimes I am up with the first one; at other times I am down with the men.

27321. When do you leave the surface of the colliery?—You can say you leave at from 5 to 5.30.

27322. As a rule you are there at 6 o'clock in the morning and as a rule you are there till 5.30 in the evening?—Yes.

(*Chairman.*) Have you any time for dinner?

27323. (*Mr. Wm. Abraham.*) He has no time for that. With regard to eating food, you do that when you can?—Yes.

27324. There is no specific time for that?—No.

27325. You carry it with you and put it in your room?—Yes.

27326. We want to know exactly what the state of things is. Do not exaggerate it in any way?—No, I will tell you exactly as it is.

27327. You are now the night overman?—Yes.

27328. You have the same duties allotted to you as a night overman as if you were a day overman?—Yes.

27329. In the absence of the under-manager would you have his duties to perform?—Yes.

27330. I want to call your attention to Special Rule 42: "He shall be at the colliery during the working hours of his shift, and shall not absent himself under any circumstances without first having had permission from his superior officer, and given information to the person or persons next in authority below him of his intended absence." Then Special Rule 43: "He shall, during working hours, examine the travelling roads, airways, and working places in the mine, and maintain over them and over the timbering, ventilation, and lighting of the mine, and all operations therein, a careful supervision, so as to ensure the safety of all persons in the mine." Will that be all the travelling roads and all the working places?—Yes.

27331. Throughout the mine?—Throughout the part of the mine he has to look after.

27332. Is your mine divided into districts?—Yes.

27333. Are you as overman supposed to examine all the travelling roads outside your own district?—No, everyone has his district, the same as a fireman.

27334. In the first place you shall "during working hours examine the travelling roads, airways, and working places in the mine, and maintain over them and over the timbering, ventilation, and lighting of the mine, and all operations therein, a careful supervision, so as to ensure the safety of all persons in the mine." I understood your first answer to be that you do that in all parts of the mine?—In all parts I am looking after. I have two firemen, and another has two firemen, or perhaps another will have three firemen. My duty will be to examine all the roads and airways belonging to those two firemen.

27335. Is there another overman with you?—Yes.

27336. How many overmen are there?—There are 10 in the colliery.

27337. Which of the pits are you an overman in?—No. 2.

27338. How many districts is No. 2 divided into?—It is divided into five districts, three one side of the pit and two the other.

27339. Have you five overmen in No. 2 pit?—No, there are three overmen in No. 2 pit.

27340. You have three overmen in No. 2 pit, and No. 2 pit is divided into how many districts?—It is divided into five districts.

27341. How many districts, then, are under your care?—Two, and all the roadways.

27342. (*Chairman.*) When you say "districts," do you mean firemen's districts?—Yes.

27343. Three overmen to five firemen's districts?—Yes.

27344. Is that about the ordinary proportion?—No.

27345. What would be the ordinary proportion in other parts of the mine? Would there be as many as five districts assigned to three, or more than five districts assigned to three overmen?—In our colliery there are not more than three firemen's districts, but in other collieries it is different.

27346. (*Mr. Wm. Abraham.*) You mean no more than three districts allotted to one overman?—Yes.

27347. (*Chairman.*) In your case it is only two. In one of the five districts it must be assigned to one fireman and one overman?—Yes.

27348. An overman may sometimes have three, sometimes two, and sometimes one district under his charge?—Yes, if it is not too much for him.

27349. (*Mr. Wm. Abraham*). It is according to the size?—Yes, sometimes he will do two districts better than I can do one, because they are close together, and there is no disturbance.

27350. You as an overman have the supervision of two districts?—Yes.

27351. And the roads leading thereto?—Yes.

27352. During the working hours you have to travel and examine all these roads?—Yes.

27353. And supervise the timbering, ventilation, and so forth?—Yes.

27354. Have you any system of testing the efficiency of long-standing timber?—We change it very often to see it is not going too bad.

27355. How do you find out when it becomes necessary. Is it merely a rule of thumb looking at the thing, or have you any way of testing whether this timber is right or not?—Yes.

27356. What is it?—You can do it with a knife or a mandril.

27357. But have you any system of doing it?—No.

27358. Where do you get as a rule your large falls—on your main roads?—Where the best timbering is done.

27359. Where bad timbering is done?—No, the best timbering.

27360. Do you not get falls, and some large falls, in places where timber has been standing for a long time?—Not very often; occasionally.

27361. You do get them sometimes?—Where timber has been standing for a long time the squeeze has gone from the place, and where you get large falls the gas comes in, the gas bringing on the squeeze on top, which makes a sudden crush.

27362. It is there where you know that danger lurks?—Yes.

27363. Where timber has been standing a long time there is no system of testing its efficiency?—No.

27364. What system have you of testing safety lamps?—The fireman in each district examines them every morning.

27365. Do you examine the lamps sometimes?—No, without I happen to see a lamp in the locking-place when I am there.

27366. It is no part of your duty to see that the lamps are safe?—That is done by the fireman.

27367. Where is it done?—At the locking-place at the bottom of the pit.

27368. Is there any system of examining these lamps before the men go down?—Yes.

27369. Will you explain how the testing of the lamps is done?—Each lamp is examined by a man in the course of the night in the lamp-room, who draws off the lamp gauzes and everything to test them. They are put back for the morning and lighted ready for the men to go down. The shield is not locked, so that the fireman gets his lamp and draws the shield off and sees the catches before the men go in.

27370. How does the fireman test it?—By examining the gauze and the glass.

27371. Is there anything to help him more than his eyes?—No.

27372. There is nothing to test the lamp?—No.

27373. There is nothing to test whether the lamp is fire-proof?—I have seen a gas-meter in a colliery, but not with us.

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27374. Do you not think that would be an improvement to have something to test the capability of each lamp before it is given to a man ?—Yes, I quite agree with it.

27375. Does each man get the same lamp always ?—So far as it is possible.

27376. To your knowledge, has the system been that each man has got the first lamp that could be given to him ?—Yes.

27377. That is improved now ?—That is improved now.

27378. Now each man gets the same lamp as far as possible ?—Yes.

27379. Do you not think it an improvement that each man should always get his own lamp ?—To do that each man must have two lamps, because when one is out of repair he must have another.

27380. That would only be the case very seldom ?—That is how we have got it now.

27381. How ?—Each man has his lamp every day, except when it is damaged.

27382. You have arrived at that system now ?—Yes.

27383. I am glad to hear it. You as an overman have to direct that timbers are set up in the best manner in all places where they are required, and shall take great care these directions are obeyed ?—Yes.

27384. How do you do that ?—I see they do it when I am going round, and if on the second round they are not set up in the proper way, they must alter them.

27385. You have to look after the airways and travelling roads, and see that these are kept in repair ?—Yes.

27386. Also carefully observe the requirements of General Rule 7 ?—Yes.

27387. Have you any system to regulate your observation in that case ?—On the main roads ?

27388. Yes.—We always keep them in good working order, so that our journeys can travel through them. We are bound to do that, and we keep sufficient manholes.

27389. With all the work you have to do in these two districts, and it takes you 11½ hours to do it, you still think that you have not too much to do ?—Yes.

27390. You are willing to work 11½ hours ?—I could do with less time.

27391. I think you are anxious that something should be done to minimise the risk from irregular working ?—Yes.

27392. In answer to Mr. Ellis you said that the risk arises from a place being left with nobody in it ?—Yes.

27393. That place is examined before a man comes back into it ?—Yes, and reported.

27394. So that, independent of his being off for a day, or even two, you are responsible to see that that place is safe before you allow him to go there ?—Yes, by putting this collier to do what he ought to have done during the time he has been out. The place is getting dangerous because he must do it now before he goes into the face. By stopping out, the face of a stall is stopped, and the ground is always breaking, timber and everything going, until it is dangerous. He must repair it before he can start at the face.

27395. That has to be done before he commences hewing coal ?—Yes.

27396. So that the danger is removed ?—Yes, but if he goes to work it would not be there.

27397. Is it a question of the loss of coal from his absence or a question of any increased danger he has to run ?—There are both of them: the loss of the coal and the increased danger.

27398. Where does the danger come in if you have to see that the place is put safe before he commences work ?—This man ought to put it safe. The danger is in the repairing of this place.

27399. Have you known any accident to occur from this cause ?—Yes, several of them.

27400. It is because of the danger existing that you recommend something to be done ?—Yes.

27401. I think you said no definite standard of ventilation could be laid down as being applicable to all collieries. What you want is adequate ventilation ?—Yes.

27402. How do you prove the inefficiency of ventilation ?—We contend when we get too much gas that the ventilation is bad.

27403. Have you any way of finding that out before you get large bodies of gas ?—Yes; that is the work of our firemen in their examinations.

27404. You are over the firemen ?—Yes.

27405. So that you are able to speak if there is anything to be done. What is the first proof of ventilation being inadequate in a practical way ?—The first proof is when you see it begin with a cap.

27406. You are of opinion that when a cap is seen on the lamp that the ventilation is inadequate ?—Yes.

27407. Are you of opinion it is then dangerous to leave a man working there ?—Yes; we always stop him.

27408. You always send him out ?—Yes.

27409. That is the invariable rule ?—Yes.

27410. Supposing a manager or a mining engineer came here to-morrow to say that there is no danger in allowing a man to work in a place where there is a cap, would you agree with him ?—No, I would not.

27411. (*Chairman.*) How do you feed the lamps, with petroleum, or what sort of oil ?—Petroleum.

27412. Petroleum does not show a cap as easily as colza oil ?—Yes, it shows very well.

27413. You have the most sensitive lamps ?—Yes.

27414. You do not use any colza oil lamps ?—No.

27415. Are you sure that people are agreed as to what is a cap ? Dr. Haldane says he has been in working places in South Wales and seen what he has considered a cap, but he has been told by the officials of the mine that it is not a cap at all. Do you understand what you mean by a cap ?—Yes.

27416. The slightest indication of a cap is sufficient ?—You will get a cap on a lamp without any gas at all—a small cap.

27417. You can have a cap without gas ?—It is often the case.

(*Mr. Wm. Abraham.*) That indicates inadequacy of ventilation.

27418. (*Chairman.*) I understand there sometimes may be an appearance in the nature of a cap without any dangerous gas. You say there might be a cap without any gas ?—Yes, but you will find a difference between the cap of gas and the cap that is from the oil. There is a small cap from the oil. When you are getting into gas there is plenty of difference between them.

27419. (*Mr. F. L. Davis.*) It has a different appearance ?—Yes.

27420. (*Chairman.*) You find no difficulty practically, then, in telling what cap is dangerous and what cap is not dangerous ?—No.

27421. (*Mr. F. L. Davis.*) With regard to the danger that exists from men not coming into their places regularly, Mr. Abraham put it to you that before the man is allowed to work his place has been repaired ?—Yes.

27422. I understood from your remarks that the danger of repairing that place is very great ?—Yes.

27423. It has been left for one day, and to the man who has to go into and repair that place it is more dangerous than if he had been working there the day before ?—Yes, it may be left for three or four days.

27424. The danger becomes greater to the repairer of those places ?—Yes.

27425. With regard to the test of the lamps, you said that there was no actual test underground except the firemen looking at the lamps ?—Examining the lamps.

27426. Is there not a test in the lamp room before the lamp is handed to the collier ?—Not with us. The only place I saw it was Nixon's Colliery, Mountain Ash.

27427. The lamp is cleaned and examined—I mean seen to be, as far as possible, intact ?—Yes.

27428. But there is no test applied ?—No.

27429. How many men would there be in the district under your charge ?—Of colliers, do you mean ?

27430. Colliers first, and you can then tell me the others? —Some are about 250 by night with me now.

27431. How many working places would that be ?—That would mean about 45 to each fireman; there are two firemen.

27432. About 90 places ?—Yes.

27433. All the roads in that district would be under your supervision ?—Yes.

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27434-9. Your duty as overman is to examine all these places once, and all the roads, and to report to the manager anything, that it is out of place or not in working order, and everything that is not as it should be ?—Yes.

27440. With regard to timbering, you, as overman, have to tell the colliers how to do the timbering ?—Yes.

27441. As you get to the place you tell him what you think wants doing ?—Yes.

27442. You cannot be in every working place at the same time ?—No.

27443. When you are away and any squeeze takes place, or any alteration in the conditions, the collier is the best man to know how to protect himself ?—Yes.

27444. (*Mr. Wm. Abraham.*) In your opinion every collier ought to have a certificate of competency ?—That is what I want.

27445. (*Mr. F. L. Davis.*) When you tell a man to do timbering you would like to feel sure that man is competent to do it, and understands what he has to do for his own safety ?—As far as a stranger coming to start is concerned, I soon find out what sort of a man he is after a few days, but that may be too late.

27446. You said when new men are taken on you would like the manager to be able to find out if they are really competent men in the particular kind of work they have to do ?—Yes.

27447. Nothing is done at the present time ?—No.

27448. A man comes and applies for work and says : "I have been a timberman at Clydach Vale, or Mardy, or anywhere else, and the manager takes him on ?—Yes.

27449. What is the reason that the men are taken on so easily ?—Shortness of men.

27450. Shortness of labour ?—Yes.

27451. Because labour is scarce, the managers are apt to take almost any men that applies for work ?—Yes.

27452. (*Chairman.*) So that when trade is good there ought to be more accidents. When work is brisk and managers are very much in want of colliers and other men in the mines, the chances are there are more accidents ?—No doubt.

27453. There would be more men employed too, but even in proportion to the men employed you say there would probably be more accidents when trade is brisk and where the managers are inclined to take on anybody who applies ?—Yes.

27454. (*Mr. F. L. Davis.*) Is it your experience that the bulk of the men put their faces against the employment of unskilled labour ?—No.

27455. They do not ?—No. They put their faces against the colliery owners, do you mean ?

27456. The bulk of the men working in the district will be against the management taking on any number of men, some of whom may be unskilled ?—Yes.

27457. I do not know whether it comes under your experience, but I will ask you this question, because I have known it in our districts. Have you known where the management has taken on a number of men where they were short of men and those engaged in the colliery have made it so hot for them that they have had to go ?—Yes.

27458. The difficulty of the managers very often is to get labour, and when they get it they are not allowed to keep it ?—No.

27459. (*Mr. Smillie.*) Do you employ any men yourself ?—Yes.

27460. For what class of labour ?—Timbering, ripping, labourers, hauliers, roadmen.

27461. Are you entitled to employ any colliers ?—No, only what the day manager or day overman employs. There is no work with us by night on the coal, only in places where there is double shift, so that we have no need to employ colliers.

27462-9. Does the manager or under-manager of your colliery employ the colliers ?—The overman employs the colliers and the manager signs for them in the morning.

27470. Is your evidence to some extent given on behalf of the management and owners as well as on behalf of the overmen ?—I answered the questions so far as my own ability was going, as you see them there now.

27471. I should like to know whether this evidence of yours was strictly on behalf of the 230 members of the Colliery Officials' Association, or whether it is not partly on behalf of the colliery owners of South Wales ?—It is on behalf of both of them.

27472. How long does it take the fireman to examine 45 places under his charge in the morning ?—About 2½ hours.

27473. About 2½ hours to make the morning examination ?—Yes.

27474. That would mean five hours for the two districts if one fireman had to examine both those districts ?—Yes.

27475. You, in your 11½ hours, are required to examine both districts ?—Yes.

27476. Your examination of these places would take five hours working alone continuously ?—I am working two districts in the course of time.

27477. What do you mean ?—In the course of my shift.

27478. Quite ; but it would take five hours for you to examine the places ?—Yes.

27479. In addition to that, when making the examination, you have all the duties which Mr. Abraham went through in those rules ?—I have to carry my instructions all through.

27480. Could you say if there are many members of this Colliery Officials' Association in South Wales, in this part, at least, who hold a certificate of competency under the Coal Mines Regulation Act, first or second-class managers' certificates ? Do some of the members of your Colliery Officials' Association hold first or second-class managers' certificates ?—Yes.

27481. A number ?—Yes.

27482. Do you yourself hold a certificate ?—No.

27483. Do you know what proportion of the overmen employed at your colliery hold a certificate ?—Yes.

27484. You said 10 overmen were there, I think ?—Yes. Three out of the 10 hold a certificate.

27485. Are the wages of the night or day overmen higher than the wages paid to the firemen ?—Yes.

27486. Do you think that that wage is sufficient to encourage the best men to take employment as overmen ?—Yes, I believe it is.

27487. You think they are quite fair wages for the workmen ?—Yes. I cannot answer for other collieries.

27488. I mean as a whole, not at this colliery particularly, but as a whole, over your coalfield ?—I do not know ; I could not say.

27489. I was going to say that you are about the only contented people I know if you are quite satisfied at the present time. Will you tell the Commission why a collier is the best man to do the timbering to secure his working place ? What is the reason of it ?—He is not supposed to have a place without he is a thorough practical man to look after his own safety.

27490. I mean a thoroughly skilled collier and timberman. Why do you say he is the best man ? If you had a timberman who had had considerable experience in timbering, he would be as good a man as the collier ?—Yes ; taking charge of his own place and general safety of his working place, I mean.

27491. A collier has to do something else besides timber his place. He has to get coal and fill it ?—Yes.

27492. He is paid by the ton ?—Yes.

27493. Are all your workings longwall workings ?—All longwall. Some part of the mine is barriers.

27494. (*Mr. Wm. Abraham.*) That is longwall in a broad sense ?—Yes.

27495. (*Mr. Smillie.*) The collier being paid by the ton is sometimes tempted to neglect danger. Perhaps the danger of a bad stone may be neglected because of his being anxious to get out as much coal as possible ?—Yes.

27496. Some accidents may arise from the collier neglecting to timber where he should, if in a hurry to get a tram filled ?—Yes.

27497. If there was a man in charge of six or eight places with nothing else to do but timber those places, there would not be the same neglect on his part, because he would not be paid by the ton ?—No.

27498. You complain that the men do not work regularly. What do you call irregular work ?—A man not attending to his work regularly, when he is ill.

27499. Would you say if a collier attended five days a week at the pit that would be fairly regular ?—Yes.

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27500. You would not expect him to be there six days every week ?—No.

27501. You would not complain if a workman took one play-day in a week. If he attended five days a week all the month round, that would be reasonable ?—Yes.

27502. What you object to are people drinking and lying off for three or four days and then coming in to work ?—Yes.

27503. I think you will admit that there is extra danger arising from that ?—Yes.

27504. I was wondering whether you wished to lay down that a collier must work every day that a pit is open ?—No, I do not suggest that. I only say the danger is this, by allowing it to stand.

27505. When a collier has been off three or four days and the place is standing, it gets broken; the other places going forward bring weight on it, and it makes it more dangerous ?—Yes.

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27506. Does the collier require to put his place in order when he comes out ?—If he does not we have to put a timberman there.

27507. What is the custom ?—The collier himself does it.

27508. Your previous answer, although I think you did not mean it, led Mr. Davis to believe that you had to put men on to put it in order before the collier started, but the collier himself has to repair it if gone out of order through his being away ?—Yes.

27509. If a man is off with sickness, and his place gets badly broken you would be entitled to put it right before he started ?—If a man is ill we put another man to keep his place going, but when a man is on the spree you cannot put a man in his place.

27510. He requires to put men on when he comes out ?—Yes.

Mr. JOHN WILLIAMS, called and examined.

STATEMENT OF WITNESS.

Mr. J Williams.

27511. (1) *Safety Lamps.*—I am of opinion that, with the exception of the prohibition of the old-fashioned screw-locked lamps no further restriction is necessary. I object to double gauze on the lamps because it is impossible to get sufficient light, and the lamp soon gets hot and clogged.

(2) *Use and Firing of Explosives.*—I am of opinion that it might be made compulsory for the holes to be charged by officials instead of allowing this to be done by the men as is permitted at present. If might also be made compulsory for the workmen to purchase their explosives from the Colliery Owner and not be allowed to bring it to the colliery from the outside, so that the officials of the colliery could be certain that the proper kind of explosive is being used.

(3) *Falls of Roof and Sides.*—I think that it would be very advisable that men applying for the position of colliers, repairers and hauliers should produce certificates showing the length of time they had been in their last employment, and the amount of experience they had had in these departments, so as to prevent the employment of inexperienced men in these capacities. These falls are frequently due to the irregular attendance at work of the men, and the rules are sufficiently stringent if properly carried out, combined with more regular work.

(4) *Haulage.*—A number of accidents happen from the men not using the man-holes on the engine planes, and although the employers are compelled to provide these means of safety for the men, they have no power to compel the workmen to use them. I am of opinion that the Special Rules might be made more stringent in this respect.

(5) *Special Rules.*—I am of opinion that the present Special Rules are far too numerous and too complicated, that there are too many repetitions, and that a large number of the men do not attempt to acquire a knowledge of these Special Rules. I think that they could be made much simpler. I am of opinion that it would be a great advantage if boys were taught these Rules in the last year in school. It might also be advisable if the Special Rules for each section of men were printed and supplied to these men separately, instead of in a considerable pamphlet, with the rules for officials and others, as they are at present.

(6) *Administration of the Mines Act.*—I think that discipline in mines is improving, but something might be done in the way of giving more power to the officials to enforce the necessary orders.

(7) *Standard of ventilation.*—I think that it is absolutely impossible to lay down a standard of ventilation, and that General Rule No. 1 is sufficiently stringent if properly carried out. In view of the fact that some districts require a much larger quantity of air than others of the same size, and that the same district even requires a larger quantity of air at certain times, it is impossible to fix any standard quantity of air.

27512. (*Chairman.*) You represent the South Wales Colliery Officials' Association, which consists of about 230 members, officials in the bulk of the collieries in the Rhondda, Merthyr and Aberdare Valleys. What proportion do you think of the officials of those mines belong to your Association ? Do you think most of them belong to your Association ?—Yes.

27513. About nine out of ten ?—Yes, the most part.

27514. Do I understand that you have had any conversation with the Association with regard to your evidence ? You have talked to the Association about the evidence you are going to give to-day ?—Yes.

27515. The Association knows the evidence you are going to give ?—Yes, I was before them and was selected to come before you.

27516. Have you shown them what you intend to say ?—Yes, I have it here.

27517. I notice in some respects your evidence differs from that of the last witness, who also appears for the Association. For instance, on the question of lamps, you object to a double gauze lamp ?—Yes.

27518. Do you think you represent the views of your Association in objecting to double gauze lamps, or do you think that Mr. Griffiths' view is more in accordance with the opinion of the Association ? He says he wishes double gauze lamps to be used, and you say that you do not wish double gauze lamps to be used ?—It is the views of the Committee selected from the Association, the most expert mining engineers in South Wales.

27519. You represent their views. Mr. Griffiths, apparently, on that point does not represent their views ?—No, not of the Committee.

27520. He may represent the views of the majority of the members of the Association, but you do not think that he represents the views of the Committee of the Association ?—I do not believe that the majority of the members of the Association are in favour of the double gauze lamp.

27521. Neither the majority of the Committee nor the majority of the Association are in favour of the double gauze lamps ?—No.

27522. With regard to the use of explosives, you think it ought to be made compulsory for the holes to be charged by officials. In some mines that is done, but in some mines it is not. In some mines it is made compulsory by the management ?—It is not compulsory, but I believe it ought to be made the law.

27523. There are no Special Rules in your district obliging officials to charge the holes, but, as a matter of fact, in a great many mines the management insist, without a Special Rule, that officials shall charge the holes. Is that not so ? In many mines it is the practice for the officials only to charge the holes ?—It is not carried out in that way in my colliery, where I am at present, but I have been in collieries where it has been carried out.

27524. You think there ought to be a Special Rule that should apply to every mine in your district ?—Yes.

27525. You say it ought to be made compulsory for the workmen to purchase their explosives from the colliery owner, and not be allowed to bring them to the colliery from the outside ?—Yes, entirely.

27526. With regard to falls of roofs and sides you think that it would be very advisable that men applying for the

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position of colliers, repairers and hauliers should produce certificates showing the length of time they had been in their last employment and the amount of experience they had had in these departments, so as to prevent the employment of inexperienced men in these capacities. The last witness said he thought the same result might be obtained in another way by insisting upon some public examination of men, or rather that they should be compelled to produce certificates of employment. He thought there ought to be some examination?—Yes, I quite agree, so that we may know what the men are. In my colliery district you will get somebody asking for work who has never cut coal in his life: perhaps he has been employed underground as a labourer, or he will ask for work as a haulier and say that he has been driving. Perhaps he has been driving outside, but not underground.

27527. I understand sometimes that the men have objected to the system of certificates and do not like to be placed in the hands of the managers to the extent of being obliged to produce from any mine where they have worked a certificate of exactly the character of work they have done, and how long they have been doing it, and whether the manager thought they were competent to do it or not. They would prefer, I understand, that they should undergo some public examination which would test their capacity, and that it should not be left to the management to give them certificates?—There ought to be something to meet the 232nd Special Rule.

27528. (*Mr. Ratcliffe Ellis.*) That is that no unskilled person shall work alone?—Yes.

27529. (*Chairman.*) The question is how we are to carry that rule into effect?—Yes.

27530. There might be two ways. You suggest when a man goes from one mine to another and applies for work that he should carry with him a certificate as to the time he has been employed in a particular work, and the kind of work, and whether he is competent or not to do the work. That is one way of doing it. That would leave the whole responsibility on the management. It has been suggested, on the other hand, that it might be undesirable to leave these powers in the hands of the management of the mine, but that the same result would be obtained, perhaps better, by the men having to undergo some examination; for instance, that a man should not be employed in hewing by himself (of course he must learn how to be a hewer under somebody else) unless he had passed an examination or test which would show that he was a competent hewer?—Yes.

27531. Then you object to the irregular attendance at work of the men and consider that falls are frequently due to irregular attendance. How would you deal with the irregular attendance of the men?—It is not dealt with strictly enough. Men lose their work and cause accidents to a collier working in advance. I believe there are a lot of accidents from falls of roofs and sides owing to the men losing their work. One face has gone on and another one will be behind. They occur through the roof breaking and the timber breaking.

27532. We understand that, but can you suggest any system to obviate that and enable every face to be worked at the time it ought to be worked so that the whole work might go on steadily. You cannot expect a man always to come to work, he might be ill?—We do not expect him to come when ill, but some waste their time. There are good workmen employed underground as hauliers, colliers, repairers and stowers, but there are very bad ones too.

27533. You have no suggestion to make on the subject; all you say is that it is desirable the men should work as regularly as possible?—Yes.

27534. You say that the rules are sufficiently stringent if properly carried out?—Yes.

27535. With regard to haulage, you say a number of accidents happen from the men not using the man-holes on the engine-planes, and although the employers are compelled to provide these means of safety for the men, they have no power to compel the workmen to use them. I suppose you mean refuges by man-holes?—Yes.

27536. I should have thought when a man saw there was any danger he would go to a manhole to shelter himself if he could?—There is no law to compel him to go.

27537. Do you require a law to compel a man to go into a manhole when in danger from a tram?—What about timbering; there is a law to that effect?

(*Mr. F. L. Davis.*) I think he means the overman will tell the men they must go into these places, but they do not do it.

27538. (*Chairman.*) They do not attend to what they say. You tell the men it is their duty when there is any appearance of danger to take refuge in these manholes, and they do not do it?—When a workman sees there is a law, and you can prosecute him for not doing so, he will keep that better in his mind when travelling over haulage roads. I think he would be more likely to turn into a manhole or a place of refuge.

27539. You say that the present Special Rules are too numerous and too complicated, that there are too many repetitions, and that a large number of the men do not attempt to acquire a knowledge of these Special Rules, and that they could be made much simpler. You suggest that these Special Rules should be re-written and made very much shorter?—Yes.

27540. You think everything that is necessary could be put in much shorter form than it is at present?—Yes.

27541. You also think that the Special Rules for each section of men should be printed and supplied to these men separately?—Yes. May I draw your attention to No. 188 of the Special Rules: "No person, except a shotman when firing a shot, shall, under any pretence, or for any purpose, unlock a lamp in his charge in any place in the mine, or take the top or shield off a lamp except at a lamp station."

27542. What do you wish to say about that?—He should not be allowed in any case to unlock his lamp.

27543. Not even a shotman?—No.

27544. (*Mr. Ratcliffe Ellis.*) How long has this rule been in existence?—Ever since I remember.

27545. In the early days, when these rules were first formed, how did they fire their shots—by a fuse?—Yes.

27546. They fired them by lighting a fuse?—Yes.

27547. Where did they get the light from?—By placing a piece of touch paper on the gauze of a Davy lamp until it lighted, and afterwards firing the fuse with it; or by inserting a wire through the meshes of the gauze of a Davy lamp until it got red hot, and afterwards light the fuse with it. The above was the general practice in fiery mines; after this the Rule was altered, giving permission to shotmen to open lamps for the purpose of firing shots.

27548. (*Mr. Wm. Abraham.*) That rule ought to be removed?—Yes.

27549. (*Chairman.*) You say that it would be a great advantage if boys were taught these rules in the last year in school. Do you think it ought to be made compulsory that boys before going underground should be examined in these rules and in the provisions of the Coal Mines Regulation Act?—Yes, I believe so. They ought to be taught in that direction, because 80 out of every 100 of our boys that are taught in school in the colliery districts go to work underground.

27550. Then with regard to the administration of the Coal Mines Regulation Act, you are of opinion that discipline in mines is improving, but something might be done in the way of giving more power to the officials to enforce the necessary orders. What powers would you require? What powers have you now, and why do you think them insufficient? In what respect are they insufficient?—That is as regards the manholes, as pointed out in the Special Rules.

27551. Is that the only suggestion?—Yes, that I remember.

27552. Do you think that the officials should be empowered to place the men under penalties to provide for their own safety better than they do apparently at present?—Yes.

27553. You have no particular provision in your mind by which that could be done?—No, I do not remember now.

27554. You have no proposal to make on those lines?—Yes. Special Rule 244 should be strengthened.

27555. Then we come to the standard of ventilation, and you say that Rule No. 1 is sufficiently stringent if properly carried out, and in view of the fact that some districts require a much larger quantity of air than others of the same size, and that the same district even requires a larger quantity of air at certain times, it is impossible to fix any standard quantity of air. Do you say that in every case where there is a cap on a safety lamp the men should be withdrawn from the working?—No, I do not believe so.

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27556. Would it depend on the size of the cap or the class of lamp employed, whether colza oil or petroleum ?—Of course, when the cap extends up to the gauze it is dangerous, and we have to withdraw the men.

27557. You think a small cap on the lamp does not indicate danger ?—No ; where there is no shot-firing going on there is no danger whatever. I have been working years with a small cap, more or less, as far as one-eighth of an inch.

27558. Have you any idea what you would consider a dangerous cap ? How big a cap would be dangerous, in your opinion ?—Any indication of gas will be dangerous where there is a shot to be fired.

27559. Independently of shot-firing in an ordinary working place, where there is no shot-firing going on, what sort of a cap do you consider dangerous ?—I do not think there is any danger in an eighth of an inch cap.

27560. Is there any danger in a quarter of an inch cap ? —I cannot follow that experimentally like that, but I have been working several times in places where there was a quarter of an inch cap.

27561. You have not thought it necessary to leave the working because of a quarter of an inch cap ?—No.

27562. Did you think a quarter of an inch cap was a safe cap ?—I would not say a quarter of an inch ; I would say one-eighth of an inch.

27563. One-eighth of an inch would be perfectly safe, but you have often worked with caps of a quarter of an inch and not left the working ?—I believe it is almost impossible to keep a colliery without any indication of gas, that is in some places, between the place that receives the air last and the main return. It is impossible in fiery mines.

27564. You find it difficult to lay down any rule as to the size of the cap which indicates a dangerous accumulation of gas ?—I should think it is impossible to lay one down.

27565. (*Mr. Wm. Abraham.*) Have you been allowed to work in an ordinary working place—not the last place where the air goes into the return, but an ordinary working place in any colliery in the district, where there was a quarter of an inch of a cap on your lamp ?—Yes. That is an ordinary working place in the last place. That may be working continually every day.

27566. That last place is one place out of 500 ?—Yes.

27567. Come back to the middle of the workings. Have you been allowed to work in any ordinary working place inside the collieries where you had a quarter of an inch cap on your lamp ?—Not in the middle of the workings.

27568. What part of them ?—The place nearest the return.

27569. Is that the one place ?—Yes, or in the return.

27570. Do you know of a man being allowed to work any districts in any colliery in South Wales where there is a quarter of an inch cap on a lamp ?—Not in a district in the centre, but in the return you will get it occasionally.

27571. You answered the question generally to the Chairman ?—Yes.

27572. (*Chairman.*) Is that a distinction ? It is the worst place. You are putting it just before the returns in the last working face before the return airway, that is the place where the gas is most likely to be found ?—Of course it would increase by going all round through the working places, the strata giving out gas here and there, and the ventilation carries with it all the noxious gases by passing by and into the main return, and in the last place or the couple of last places nearest the return you will find the gas the greatest.

27573. (*Mr. Ratcliffe Ellis.*) If there is any at all, that is where you will find it ?—Yes.

27574. (*Chairman.*) If you found a quarter of an inch cap anywhere else but in this most gassy place of all you would leave them working, but if you found it in this particular place, where you are likely to find the greatest accumulation of gas, you would not let them work ?—I would not like to say that. I say what I have been doing myself. I am speaking from a practical point of view. I am speaking of what I have been doing, and nothing did happen.

27575. You would not like to say that you were quite in safety ?—It would be safer without any indication at all.

27576. Do you say you have worked not in these middle workings but at the end where the gas would accumulate most when there has been a quarter of an inch cap shown on the lamp ?—Yes, I have.

27577. Do you consider that it was right that you should have worked there. Do you think it was safe ?—It was rather dangerous.

27578. A quarter of an inch cap wherever it is is rather dangerous ?—Yes.

27579. An eighth of an inch cap in the beginning of the return airways or the last working face before you get to the return airways is not dangerous ?—No.

27580. A quarter of an inch cap may be dangerous but an eighth of an inch cap is not dangerous ?—No.

27581. (*Mr. Ratcliffe Ellis.*) With reference to the irregularity of the attendance of the men, you think that is a source of danger ?—Yes, greatly.

27582. That, I am afraid, is something which Acts of Parliament cannot alter. You cannot make a man attend regularly to his work by Act of Parliament ?—There is a law to that effect now, that the management can prosecute a person for not attending and wilfully neglecting his duty.

27583. Do you think that the institution of general prosecutions for this non-attendance would improve the attendance, or do you think that it is so ingrained in the nature of the men that that would not do any good ?—I was instructed by the Committee of the Association to bring the question before you.

27584. You would rather this Commission formed an opinion than you offered an opinion ?—Of course there is a law to that effect now.

27585. You wish the Commission to consider whether they make a recommendation that that law should be enforced. You say it is a source of danger and you leave it to the Commission to say how that might be mitigated ? —Yes.

27586. With reference to the qualification of men who come for employment, I understand you to say that you are under the obligation yourselves not to employ any unskilled men. Your rules say no person unskilled in any particular work is to be employed in that work, but you have no means of ascertaining whether a man is skilled or not who applies for the employment ?—We have no means.

27587. Your complaint is that you have not sufficient means of ascertaining the qualification of a man who comes to apply for work ?—No, there is not.

27588. Do you suggest that every collier should have a certificate of competency ?—Yes, collier, haulier and repairer.

27589. The man who gets the coal, the coal getter ?—Yes.

27590. Do you say the collier ?—Yes.

27591. The haulier and the repairer ?—And the timberman.

27592-3. Do you suggest that every class of labour in a mine should be certified as competent after examination ? —I should say about the firemen that they ought to go through an examination with regard to the Special Rules. You must not make it too hard or else we should lose the best practical men employed in the colliery.

27594. You agree that if a very stiff examination was made for firemen you might lose the best men that you have now, who are doing their duties satisfactorily ?—Yes ; but it would be a good thing, I think, for them to pass an examination; that is, as regards the Special Rules, the Coal Mines Regulation Act and Ambulance.

27595. These very good men whom you do not want to lose have not certificates now ?—No, there is not one out of every 10 of our firemen in South Wales who has a certificate, but they are thoroughly practical.

27596. They are good men ?—Yes.

27597. A certificate would not improve them ?—No, but it would improve the ones coming in their places.

27598. These men have got to this state of efficiency without an examination at all. Why should not other men do the same ?—There are some black sheep amongst the white ones.

27599. It is to keep the black sheep out that you want these certificates ?—Yes, I think no fireman should be allowed to be a fireman under from 26 to 30 years of age. Persons ought to have ten years' experience underground before being appointed fireman.

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27600. You can be a manager at 23?—I take it the fireman's duty is the most important office of officials underground.

27601. Should he not be appointed before 26?—26 or 30.

27602. What is he to do up to that time?—Work as a collier, a haulier or a repairer, the same as myself. I have worked underground since I was between eight and nine years of age.

27603. You think firemen are best selected from the colliers. Their business is not like the colliers—getting coal, it is a different kind of work—inspection. Do you think the training of a collier best qualifies a man to act as a fireman?—General knowledge of working underground.

27604. Take the coal-getter. Is that training the best training for a man going to be an examiner or a fireman?—A coal-getter or a timberman and haulier as well. Of course general knowledge is the best.

27605. Would a second-class certificate suit you, or would you have some other examination?—I believe that would be too stiff for a fireman to pass.

27606. You want something less stringent than the second class?—Yes, much below.

27607. Take the men who get the coal: do you think they should be required to have certificates of competency also?—The management ought to know somehow what had been their experience.

27608. It is desirable that all the men engaged in the mine should be competent, but the thing is whether it is practicable that every coal-getter should be required to pass an examination and obtain a certificate?—I believe they have to pass their examinations in America.

27609. This is England or, rather, Wales. Do you think it is a practical suggestion that a man should not be allowed to work as a collier until he has passed an examination and obtained a certificate of competency?—I believe you would not have so many accidents if you have real practical men as coal-getters.

27610. If you had all practical men and all careful men, probably you would have fewer accidents?—I believe so.

27611. You cannot obtain carefulness by an examination or a certificate of competency?—No.

27612. Therefore, it would not help in respect of that. Do you think there is such a state of things in connection with mines in Wales that the general run of colliers are so incompetent to do their work that it is a source of danger?—I believe, as a general rule, the workmen of South Wales are the best men in the world as underground miners.

27613. They are fully competent to do the work?—There are some——

27614. There are some, I have no doubt, everywhere that are not competent in every class. Do you suggest that there should be a law passed that no man should be allowed to work as a collier who had not obtained a certificate of competency by examination?—No. I believe that we would lose half of our colliers, because they could not pass the examination.

27615. You do not think it is a practical suggestion?—Not for colliers.

27616. Now take the haulier, the man who works on the road. There are boys working on the road?—Yes.

27617. They get to be young lads and then to be men and they get their experience as they go along?—Yes.

27618. At what stage would you have this examination passed in the haulier's career?—I do not know. I suggest the certificate should be for colliers, hauliers or timbermen.

27619. I am speaking of hauliers. When do you suggest that this examination should be passed. A boy gets into a young man and works on the roads and so on until he gets into a more important position. When is he to pass his examination?—I think there is a law to the effect that a boy should not drive before he is 18.

27620. At what stage in his career, which is an advancing one, is he to pass an examination?—How many years ought he to have underground, do you mean?

27621. I want you to tell me when he is to pass an examination. The men who work on the roads begin as boys and they go on growing into young men. They are hauliers in one sense all the time. When is he to be stopped working unless he passes his examination?—I do not think examination will suit colliery hauliers very well or either of them.

27622. I am not advocating this. You say a person should not be allowed to work as a haulier unless he has obtained a certificate by examination. He should not have a horse under his care until he is 18 years of age, and until he has had two years' experience underground.

(*Mr. Smillie.*) Showing the length of service with the last employer.

(*Mr. Ratcliffe Ellis*) It is not a question of service; it is a question of competency.

(*The Witness.*) If the workman has been in the same colliery, or if we knew the person, there would be no objection because we would know what he had been.

27623. The suggestion is that this information should be conveyed to you by the fact that a man is able to produce a certificate of competency which he has obtained by examination. You say that all persons working in the pit should be subjected to that, but we have excluded the collier because it would not be practicable. The fireman you think is desirable. Now I am talking about the haulier. Is it practicable that the haulier should have a certificate of competency obtained by examination before he is allowed to work as a haulier?—Yes, to cover one colliery to another.

27624. He may be a competent man and pass no examination at all and yet be fully competent to do his work at one colliery, but before he obtains employment at another he has to pass an examination to obtain a certificate. Is that the idea?—Yes.

27625. That is the best you can suggest on that subject?—Yes.

27626. With reference to the powers of officials, what more power do you suggest that the officials should have?—I referred to the rule about entering manholes. The official is powerless as regards telling a person to go into a manhole. There is nothing in the rules to compel a man to go there.

27627. Is that the only point upon which you think the officials should have more power?—If a person has wilfully misconducted himself there should be a law behind the official that he can send him out from the colliery.

27628. Do you want the official authorised by Act of Parliament to discharge a man who misconducts himself?—Yes, or prosecution, as the case may be.

27629. You have that power now?—I do not believe you can dismiss a person from a colliery. He can demand his month's notice.

27630. It depends on the misconduct. If a man was doing something which would endanger another person's life you would be entitled to dismiss him. In what direction do you think the official should have greater power. You can put into operation the provisions of the Coal Mines Regulation Act, and if a man breaks a General or Special Rule you summon him before the magistrate. Do you know that?—Yes.

27631. What more power do you wish to place in the hands of the officials? Do you want to compel a man to do what he is told to do. Is that the power you want?—Yes, that is one rule.

27632-53. It would be a most useful thing if you could suggest any way by which you could get that except by prosecuting or punishing the men if they did not do it. Except with regard to the use of the manholes, you suggest no other way in which the officials' power should be extended. Is that so?—No.

27654-6. (*Mr. F. L. Davis.*) What you want, I think, from what you said, is better discipline in the collieries?—Yes.

27657. Is it your experience that frequently men will not do what they are told to do when it is for their own safety or when their own safety is involved?—It is sometimes the case that they will not do what they are asked to do.

27658. You have given an instance of a man not going into manholes or places of refuge. Have you ever found men riding on journeys, which is strictly against the Rules?—I have not myself, personally, but others have, and they have been prosecuted. There is a law to that effect.

27659. Take cases of that kind, that is what I wanted to put to you. Officials in charge, if they see anything of this kind, would have to tell the men they are not to do it?—Yes.

27660. In spite of that the men do it, and very often accidents happen?—Yes.

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27661. You can prosecute for a number of these things ?—Yes, for riding on the shackles.

27662. Do you, as a matter of fact, yourself, in your colliery, prosecute when you find men disobeying orders ?—Yes ; I have never, myself, come across one riding, except when he is authorised to do so. Of course, there are riders. You must allow them, or else it will be one hour until they reach their destination.

27663. That was only an instance. I mean anything that is a breach of the Special Rules in the colliery anywhere of any kind. Do you prosecute in your colliery when you find a man breaking the Special Rules ?—Yes.

27664. Do you do it often ?—Not very often. I have not prosecuted one where I am now, at Cwmaman.

27665. What do you do the first time a man breaks the Special Rules ?—Report him to the manager.

27666. You warn him ?—Yes, and report him. In some cases we report to the manager. The men say they will not do it again. Of course, if you prosecuted every man who is not carrying out the Coal Mines Regulation Act and the Special Rules you would have plenty of work : you would have to prosecute every shift.

27667. I quite agree with you there. It would be impossible to prosecute every man for every breach, but if prosecuting were a little more general do you think, or do you not think, that would have a good effect ?—I do not believe in the system of prosecuting, myself. I believe more in inducing persons to learn, but we want the law to meet the case of a stupid sort of man. There are very few of those who are employed amongst us underground. The man who has common sense will not require anyone to tell him to get out of the way on the journey, but there are fools who will run out. Most of the men, even myself, going in take more time than coming out. They run, and do not consider where they are going. It is a very important point in case of hauling to get some law.

27668. Mr. Ellis asked you, and you were unable to tell him, by what process you were going to compel a man to do what he is told to do, even for his own safety ?—Prosecute workmen, and the others will take warning from them.

27669. You can do that at present ?—No, there is no law to that effect, no law to the effect that you can compel a person to go into a manhole. You cannot compel a pesson if he will not go into a manhole.

27670. Whatever Act of Parliament you have you can never compel a man to do what he does not want to do ?—You can prosecute him.

27671. If he does not do what he is told, you can prosecute him, and you think, probably, if you do that discipline will be better in the future ?—Yes.

27672. How many men are there in your district ?—In the colliery ?

27673. You are overman of a certain district ?—I am overman of the whole colliery by night.

27674. How many men would be working in the colliery at night ?—200 colliers, hauliers, stowers, and repairers and assistant repairers.

27675. You are the night overman ?—Yes.

27676. Is there only one day overman, or two ?—Two day overmen, and one under-manager employed in that colliery.

27677. There will be more men employed by day than night ?—I should think about three times the number.

27678. You said with regard to the cap on the lamp that it would be impossible to lay down any rule that would apply everywhere with regard to the size of the cap ?—Yes, it is impossible to lay down a rule, because the colliery would give out more gas to day and less to-morrow. There is a rule among experts and mining engineers, but one says 32 or 33 cubic feet will dilute one cubic foot of marsh gas ; others say 40 and others say 40 to 50. The underground work is very changeable as regards giving out marsh gas from the strata, and depends on the number of men working, the horses and so on.

27679. You say that the nature or the size of the cap would indicate the danger ?—Yes.

27680. Being one-eighth or one-sixteenth of an inch would tell you nothing, but if you had two caps both one-sixteenth of an inch, the nature and the look of them would indicate whether one was more dangerous than the other ?—Yes. The greater the cap the greater the danger may be ; that is if it is pure marsh gas, or a light carburetted hydrogen, but it is not so dangerous when it is diluted with carbonic acid, or sulphuretted hydrogen.

27681. It is impossible to lay down the particular size of cap that would be dangerous in every colliery district. You speak of South Wales. We will say South Wales alone ?—Yes.

27682. You think Rule 1 as to an adequate amount of ventilation meets the point ?—Yes.

27683. As it stands that is what you want ?—As far as it is reasonably practicable. I do not believe you can do anything to remedy the first rule on ventilation.

27684. Introducing the size of a cap would not be any improvement ?—Nothing at all.

27685. How long ago was it that you worked in a quarter of an inch cap ?—Three or four years ago.

27686. I thought, in answer to Mr. Abraham, you said many years ago you were working in it ?—That is the latest time. I have been working underground since between eight and nine years of age.

27687. Has the ventilation of collieries generally improved in South Wales in the last 20 years ?—Yes, greatly, since I was employed first of all underground.

27688. You do not find men working anywhere in South Wales to-day with a big cap ?—No.

27689. I will not say a big cap, with a cap as big as they used to work 20 years ago ?—No.

27690. (*Mr. Smillie.*) Are you aware that this Commission's purpose is to devise, if possible, some legislation for safety in mines ?—Yes.

27691. Could you give us any assistance to lead us in that direction ? Have you any suggestion to make, or is the legislation of to-day quite satisfactory, providing that a law was passed saying that a person must go into a manhole to save his life ?—Yes.

27692-9. That is the only thing you suggest ?—Yes.

27700. Are the manholes in the colliery in which you are employed kept white-washed ?—Yes.

27701. The purpose of a manhole is to give refuge to a person in the event of a runaway tub, or any danger arising from his travelling on a haulage road ?—Yes.

27702. How does a mine worker find out that there is a danger of a fall from the roof ; to the skilled ear are there indications before a fall takes place ?—Yes, seeing crevices, or there may have been timber breaking, or cracking, or squeezing.

27703. Little bits falling ?—Splinting.

27704. Do you suggest that there should be a clause or a Special Rule put in to give you power to force a man to leave a place where a fall was going to take place ? Have you ever had any trouble in getting a person out from a stone that was going to fall ?—No.

27705. Have you ever had a case of an accident through a person refusing to go into a manhole when told to do so ?—I do not remember, but persons travel together, and one will go into the manhole and the other will continue his journey, and he is knocked down and killed. You want something to draw the attention of a person to these things. He may be thinking about something else.

27706. A law would not effect that ?—Yes, the law has something to do with drawing a person's attention and keeping his mind on a thing.

(*Mr. Wm. Abraham.*) He is going to commit suicide.

27707. (*Mr. Smillie.*) You made a statement that the Welsh miners were the best in the world, and you have probably a pretty high opinion of them ?—Yes.

27708. We may take it they are not more reckless of their lives than any other body of miners ?—Of course.

27709. You think accidents arise through carelessness on their part in not going out of danger into a manhole ?—They are thinking about something else. As I said just now, he wants a post, and he knows the roof has a bad stone, but he wants to fill a tram at the same time. The next time the haulier comes there he wants to get a tram filled. He knows he wants a post there, but he risks his life. I am speaking of the thoroughly practical man, not the careless man, and the stone may come down and kill him.

27710. You have a law at the present time that he should put a prop there, but he does not do it ?—No ; because the man is impractical, but the man has something else to do than putting the post, and when his mind goes from the bad stone to filling the tram, the accident happens.

27711. Supposing it was laid down by law that there must be a sufficient room along every haulage road which

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Mr. J. Williams.

16 July, 1907

is used as a travelling road, to enable men to stand at the side, do you not think that would save more lives?—It is worse where there is plenty of room between the side of the tram and the tub. You get the men to travel where there is plenty of space, and in that very time the tram may be coming, or a part of the journey, or the whole journey, as the case did happen in Abercynon Collieries, where six men were killed and 50 were entangled among all trams.

27712. (*Mr. Ratcliffe Ellis.*) He means where there is plenty of room there is less inducement to go into the manholes?—Where there is only a small place the men will look for the manhole. My point is this, where there is plenty of room between the trams or tubs and the side to travel the men will not go to the manholes; they will risk and even walk alongside the journey, and when something unusual happens (either his foot slipping or a tram off the road—shackle breaking) an accident often happens, and yet the official is powerless. The Act provides for manholes at stated distances, but does not say that a person must make use of them.

FORTIETH DAY.

Wednesday, 17th July, 1907.

PRESENT:

Lord MONKSWELL (*Chairman*).

F. L. DAVIS, Esq.
ENOCH EDWARDS, Esq., M.P.
THOMAS RATCLIFFE ELLIS, Esq.
ROBERT SMILLIE, Esq.
S. W. HARRIS, Esq. (*Secretary*).

Mr. ROBERT SHIRKIE, called and examined.

STATEMENT OF WITNESS.

Mr. R. Shirkie.

17 July, 1907

27713. I have been a winding engineman for 18 years. I have been employed in this capacity at various coal mines in Scotland and at the Gold Mines in the Transvaal, South Africa. To qualify for the discharge of the latter duties, I passed the examination required by the Transvaal Government. I have occupied various positions in the United Enginekeepers' Mutual Protective Association of Scotland. I acted as a Member of the Executive Council, as President of the Association, and I am now Agent and Corresponding Secretary. My Association, which has nearly 1900 enginemen in its membership, covers all the coal fields in Scotland. For some time the Scottish Colliery Enginemen have been agitating for improved legislation, and I have been authorised to give evidence on their behalf. I shall mention the principal of the grievances, which, in their opinion, should be remedied by legislation.

(1) *Employment of Incompetent Enginemen and Stokers at Collieries.*—In this connection, an alteration in our law on the lines of the Engines and Boilers (in and about Mines) Bill is absolutely necessary. The duties which the engineman is called upon to discharge are many and important. His responsibility is very great. In the majority of cases, for a period of 14 hours, and sometimes longer, he is required to raise and lower men at the collieries. At one time or another during every shift the life of every man employed underground depends upon the carefulness of the enginemen in charge. One moment's forgetfulness might be attended with the most serious consequences. We therefore insist, and the miners are entitled to insist, that all men in charge of engines and boilers should be competent to discharge their responsibilities. As the matter presently stands, any person can be employed as a winding engineman. A mine manager can employ any man from the street as a colliery engineman. In many cases, persons absolutely incompetent are appointed to discharge the duties of colliery enginemen, and, in certain instances, the appointment of such persons has been attended with disastrous and fatal consequences. Men are appointed without skill and without experience, and the important nature of the duties to be discharged demands that they should have both. Let me give two recent illustrations as to the harmful consequences of employment of incompetent men:—In the first case, the manager of a colliery instructed a stoker to work the haulage engine during his night shift, besides performing his other duties. This man had no knowledge of enginekeeping, and he allowed the haulage rope to coil out into the winding shaft with the result that one man was killed and three others injured. At the fatal accident inquiry, the stoker stated that he had no knowledge as to working the haulage engine, neither had any of the officials enquired of him as to his competency when he was instructed to work this very important engine. The jury returned a formal verdict, but added a rider, expressing the opinion that the Company ought to employ a competent man on the haulage engine. In the other case, there was a dispute at the colliery between the manager and two of the winding enginemen. The enginekeepers left, and the manager of the colliery employed two men who had not the necessary skill and experience as enginemen. During the first shift, one of the men caused an accident, injuring a number of workmen, and, following on that an accident was also caused by the second engineman with the same result. These, and other cases, of my own long experience as engineman, leads me to conclude that, in the interests both of the enginemen and of the miners employed at the mines, a certificate of competency is necessary. This would not be attended with any great difficulty.

In the Transvaal, where I was employed for some time, every mine engineman requires to pass an examination as to his competency. A small board of examiners, consisting mostly of men having a practical knowledge of the ordinary working, and of the emergencies which may arise in connection with the working of the mines, examine the applicant. The applicants have to satisfy the Board that they are able (first) to perform the ordinary duties of enginemen, and (second) to deal with such emergencies as may reasonably be expected to arise in connection with an engineman's employment, including also a knowledge of the legislation relating to the employment.

(2) *Dangerous Practice of having other Engines (such as Electric, Pumping, Haulage) placed in the same Engine-house beside the Winding Machinery.*—This is a practice which, I am sorry to say, is becoming very common in

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Scotland, and which, in my opinion, is responsible for many accidents in connection with the winding machinery. The duties of an engineman demand that he should, at all times, have his attention fixed on the winding machinery under his charge, and be able to attend instantly to such signals as may be given to him to raise and lower the cage. In many engine-houses the noises caused by machinery, other than the winding machinery, make it exceedingly difficult, if not impossible, for the engineman to hear and attend to the signals properly. As an engineman usually requires to attend to all the engines situated in the engine-house, it is not possible for him to give the undivided attention to the winding machinery that the proper discharge of his duties requires. Instant attention to the signals often avoids accidents to the men and damage to the plant at the colliery, and this immediate attention cannot be given if the engineman has a number of duties to discharge at one and the same time. When I explain that, in many cases, the signalling bells are not situated in the enginehouse but on the pit-head, it can be understood how, amidst the thundering of other machinery, a signal may be given and not immediately attended to, or how easily such signals may be misunderstood. There is one case being presently dealt with, which illustrates the danger arising in this regard. The bottomer, in this case, was in the act of arranging the hutch in the cage at the pit bottom when the engineman lifted it up with the result that the bottomer received fatal injuries. The pit headman and the engineman declare that the bell from the bottom signalled for the cage to be raised, but the man who assisted in the bottom says there was no signal given, and the bottomer before he died, said that the bell was not touched. In this winding enginehouse there is a pumping engine, which also drives the washer at the pit head, making a great noise, and, in my opinion, making it impossible for the engineman to recognise signals duly given. When an accident occurs the engineman is usually blamed. This is frequently not justified, as, in many cases, the management place duties upon the engineman which he cannot by any possibility properly perform.

(3) *Long Hours of Winding Enginemen.*—It is the custom in Scotland for the enginemen to work 10 hours during the day and 14 hours during the night. The day-shift miners are consequently lowered to their work every morning by the night-shift engineman after he has been over 13 hours on continuous duty. This is a fruitful source of accident to men and damage to mine property. In his most recent report Mr. Robert McLaren one of His Majesty's Inspectors of Mines for Scotland says, under the heading (Shaft Accidents) "This class of accident seems to be on the increase." Under the same heading, and in the same report he says, the accidents "were not caused by ascending cages being overwound, but by descending cages striking the bottom too hard." It is a fact consistent with my own experience as a representative of enginemen, that a great and increasing proportion of the accidents is caused in letting down the men to their work in the morning. This is explained by the fact that the men are let down by the enginemen who are already tired and worn out and cannot efficiently discharge the duties. I have myself, when between 13 and 14 hours on duty, let down hundreds of men, with the most speedy machinery, and I know what a tax it is upon the enginemen and how under given circumstances, accidents may readily occur. Many accidents do occur, but no one except the winding engineman is aware how many accidents are prevented by a true appreciation of danger and the ability to act speedily on an emergency. This cannot be expected, and, as a matter of fact, is impossible, in the case of a man who has wrought 13 hours or more. I am strongly of opinion that all enginemen should be on an eight-hours' working day. This, I am satisfied, would prevent many of the accidents which from time to time do occur, and it would consequently give to the miners, and to the masters, a security of life and plant which they do not at the present have.

I have mentioned 14 hours as a customary night shift with Scotch enginemen, but it is a fact that enginemen and stokers in Scotland work frequently for a much longer period. As far as the law is concerned, there is no limit, and the mine managers cannot be trusted to place a limit where the law places none. When men discharge duties attended with such responsibility as those of colliery enginemen it should not be in the power of the master to employ men, or of the men to work, beyond such a period as may be reasonably expected to be efficient for the discharge of the duties. Many cases have occurred in my experience emphasising the danger which results from this cause. On 13th of June last there was a serious boiler explosion, one man being killed and others injured. Everything was in order from a plant point of view, and the inspector gave it as his opinion that the boiler had exploded from want of water. It was proved that the stoker, who was in charge of the boiler, had been on duty for 36 hours, and the manager said that the stoker had volunteered to do the extra work himself. In my opinion the stoker had no right to work, and the manager should have had no right to employ him for such a long period. In another case an accident occurred in connection with the winding machinery, and one man lost his life. The engineman in this case had been 20 hours on duty at the time of the occurrence. In another instance, occurring in the district where I was employed, the winding engineman had been three shifts on duty when he overwound the cage, and seven men were killed and one injured. As matters now stand at the collieries in Scotland, enginemen have to be on duty 24 hours continuously every week-end for the purpose of changing the shifts. Can it be expected that a man 22 or 23 hours on duty can efficiently lower the whole of the men employed at the colliery on a Monday morning? Until legislation deals with this matter accidents must inevitably occur.

(4) *Enginemen have Multifarious Duties to attend to.*—In most of the collieries in Scotland the winding enginemen have many duties to attend to other than that of winding. It is quite a common practice in Ayrshire, and in many parts of the Lothians and Fifeshire, and also in many parts of Lanarkshire, for the winding engineman, when on night shift, to attend to the firing of the boilers. In many cases at night there is no one about the surface of the mines but the engineman, although there are a considerable number of workmen employed in the mines. Let me give one or two concrete cases in illustration of the practice of which enginemen complain. At one colliery in Ayrshire, where there are 60 men in the mine, the engineman has to attend to one winding engine, one haulage engine, one fan engine, two tube boilers, to fire and clean the boilers and take away the ashes. During the day while employed winding they have to leave the engine-house and go and attend to the boilers. In this case, as in the others I have mentioned, the engineman works 10 hours during the day and 14 hours at night, and during both periods there is a shift of miners in the mine. In a colliery in Renfrewshire, the engineman has at night to attend to the winding engine, to one fan engine, to one pumping engine, frequently to a second winding engine, and to fire five boilers. The Coal Mines Regulation Act provides "that the engineman at the pit-head shall during the hours of his shift, remain in charge of, and so near his engine as at all times to have it completely and entirely under his control." Further that "he shall attend for the purpose of lowering and raising persons in the mine during the time when any person is below ground in the mine." In many cases the engineman has to attend during the night to two or more winding engines, and that while men are employed in a different mine on which these winding engines operate. Under these circumstances, and in the circumstances previously mentioned, it is absolutely impossible for the enginemen to "remain in charge of and so near his engine as to have it at all times completely and entirely under his control." Accidents of the most disastrous kind are possible under such circumstances. In many cases such a time must elapse before the engineman leaves the work at which he is employed and reaches the locus of his other duties as will make the difference between safety and disaster. Where miners are working in both pits, as they frequently are, a long time might frequently elapse before the engineman could attend to that given signal.

I have not dealt with the exceptions, but have taken cases which are very common in their respective localities. The Coal Mines Regulation Act, while it has many beneficent provisions, is insufficient to deal with the various aspects of the engineman's responsibilities. If an engineman objects to the conditions of employment the master's remedy is an obvious one. He does not alter the arrangement, but he changes the engine-keeper. In my experience I have found the Coal Mines Regulation Act to be often so loosely interpreted that it might almost have been non-existent.

To summarise the conclusions at which I have arrived, I would say that in my opinion a great deal can be done to considerably reduce the number of accidents in connection with the winding machinery at mines. I am

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Mr. R. Shirkie.
17 July, 1907.

convinced that legislation is required to deal with the following questions :—

(1) Certificates of competency for enginemen and firemen.
(2) That only the winding engine should be allowed in the engine-house in which it is working.
(3) That the hours of winding enginemen be regulated by Act of Parliament.
(4) That the Coal Mines Regulation Act should be amended as only to allow the winding engineman to attend to the winding engine during the time that men are employed in the mine.

27714. (*Chairman.*) You are Agent and Corresponding Secretary of the United Engine Keepers' Mutual Protective Association of Scotland ?—Yes.

27715. Your Association has nearly 1,900 enginemen, and covers all the coalfields in Scotland. What proportion is that of the whole number of enginemen ? I suppose you include stokers and persons employed about the engines ? —We do not include stokers. That is engine keepers.

27716. Whom do you include in your Association ?—Mining engine keepers—pumping, haulage, and electrical.

27717. How many persons altogether who are eligible for your Association are working in the coalfields of Scotland ? I want to find out the proportion of men eligible for your Association who join. There are 1,900 who join ? —I expect there is not 5 per cent. outside our Association.

27718. There is another 100 who do not belong to your Association ?—I should say so.

27719. You think you have 1,900 out of 2,000 in your Association ?—Yes.

27720. You have been a winding engineman for 18 years at various coal mines in Scotland, and gold mines in the Transvaal, South Africa. Do you think you gained any valuable experience in the Transvaal for mines in Scotland and other places as regards winding ?—I saw a better system of working, a safer system.

27721. In what respects ?—Being more guarded by legislation.

27722. In the Transvaal you are required to have a certificate ?—Yes.

27723. When you get to the Transvaal the applicants have to satisfy the Board that they are able first to perform the ordinary duties of enginemen, and, second, to deal with such emergencies as may reasonably be expected to arise in connection with an engineman's employment, including also a knowledge of the legislation relating to the employment. It has been suggested before us that it would be well if there was something in the nature of a certificate required from enginemen, and that that certificate should include some examination with regard to the general knowledge of the working of engines, such, for instance, as stoking work, and so on. What do you say as to that ? —I might give you an outline, if you like, of the examination in the Transvaal.

27724. Yes ?—In the first place you are examined on the Coal Mines Regulation Act, you are examined as to your knowledge of your own duties, and the legislation upon that point. Then there is what is known as a boiler law in South Africa. There was under the Boer Government, but I do not know whether there is now. It was a law relating to boilers, and you have to give satisfaction as to your knowledge of the boiler law required by the Government, such as steam gauges, safety valves, tube water glasses, and all those kinds of things. Besides that you are examined on boilers as to cases of emergency, and as to different kinds of boilers. You have to satisfy them with information as to your knowledge regarding the boilers in cases of emergency, and legislation, and all that regarding boilers. Then, coming to the winding engines you are examined on various winding engines, and they seem to be practical men on that Board. My opinion is that the examination they put you through regarding cases of emergency and what you would do under certain circumstances, requires you to have had a very good knowledge and experience of winding engines. My opinion was that one who had not been a winding engine keeper and had not had knowledge and experience in that position could not have passed it.

27725. Do you think this examination in the Transvaal sufficiently tests a man's general knowledge of engines independently of what is required for the purposes of winding ?—It was for the purposes of winding, too.

27726. A man may be competent and know how to work his winding engine, know what handles to turn, and so on, to meet every emergency, but he may not know about the inward mechanism. Supposing anything went wrong, he might not know how to set it right ?—He is examined on that.

27727. That is part of the examination ?—Yes. To give an instance, you are asked to state the course of the steam from the boiler right out through into the air.

27728. You consider that is a model examination, and if we had an examination for engine keepers in this country you would take the Transvaal examination as a model ?—Yes.

27729. You have acted as a member of the Executive Council, as President of the Association, and you are now Agent and Corresponding Secretary. You know pretty well the views of your Association, and are entitled to speak on their behalf not only as to your own views, but the views of the majority of your Association ?—Yes.

27730. You talk about the responsibility of enginemen. I do not think any of us would deny that the responsibility is very great. You say in the majority of cases for a period of 14 hours and sometimes longer, he requires to raise and lower men at the collieries. Is that so in the majority of cases, that he works 14 out of 24 hours in Scotland ?—Yes ; in Scotland the system of working is two men to supply 24 hours. As a matter of arrangement, in order to give the man something like a fair day, he works 10 hours during the day and 14 hours during the night. It comes about that the night shift man is the man that lowers the miners into the pit ; not only so, but in a good many parts of Scotland, which I have evidence to show, they stand what is known as the long term, that is, changing from the day shift to the night shift. They stand at long term on the Sunday and the Sunday night, and it often happens they are 23 or 24 hours on duty when they lower the men to the pit.

27731. You suggest that there should be an eight-hours' day for enginemen ?—Yes.

27732. Three shifts of eight hours, or thereabouts ?—Yes, where it was continuous duty. In some pits that is not required ; the pit can stand eight hours.

27733. Where there is continuous winding up and down during the whole 24 hours with very slight intermission, no man ought to work more than an eight-hours' shift. In some parts of the day or night there would be more winding than at other times, and some men might have a nine-hours' shift and some men a seven-hours' shift ?—That arrangement is in force in some parts of England, but not in Scotland.

27734. You suggest that there should be a maximum of not more than nine or ten hours under any circumstances ?—I would suggest that.

27735. Then you say in many cases persons absolutely incompetent are appointed to discharge the duties of colliery enginemen, and in certain instances the appointment of such persons has been attended with disastrous and fatal consequences. Then you give some of the accidents. Do you say from your experience of enginemen in Scotland that a considerable proportion of the men are incompetent ?—I say that there are men employed who are incompetent.

27736. Some ?—In many cases I have known where they have had to be dismissed.

27737. When they are found to be incompetent they are at once dismissed ?—Sometimes. It depends how it suits.

27738. There might be a fatal accident before their incompetency was found out ?—That is so.

27739. You give an instance of a stoker who had no knowledge as to working a haulage engine, and nobody enquired as to his competency, and he was instructed to work a very important engine, and there was an accident by which a man lost his life. The jury returned a formal verdict, but added a rider expressing the opinion that the company ought to employ a competent man on the haulage engine. Do you know any other case where a jury have expressed that opinion, or is that the only case you know of ?—It is the only case I have cited because it was a recent accident. I attended the fatal accident enquiry about three months ago. It was at Broomrigg, in the Bonnybridge district.

27740. Could you put in the particulars of the coroner's inquest ?—Yes, but I have not it with me to-day. I do not put much stress on bringing newspaper cuttings to a Commission such as this, but I can get accurate information regarding this case from the Law Courts.

27741. (*Mr. Smillie.*) You mean the shorthand notes ? —Yes. I can send them on.

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27742. (*Chairman.*) We should like to see what the proceedings were in that case. There was another case in which there was a dispute at the colliery between the manager and two of the winding enginemen: the engine-keepers left and the manager of the colliery employed two men who had not the necessary skill and experience as enginemen, and an accident resulted. In that case the engine-keepers left rather suddenly. There was a difficulty?—There was some difficulty with the engine-keepers and the manager.

27743. The manager had to get the best men he could at a moment's notice?—No, they have generally 14 days to work before they can leave.

27744. In this case these engine-keepers gave 14 days' notice?—Seven or 14 days. In this case I am persuaded that the manager engaged these men with the knowledge that they were incompetent men.

27745. Because he could not get competent men?—That is not so.

27746. In his own interest why should he engage incompetent men?—I cannot answer that.

27747. Your belief is that the manager, deliberately knowing these men were not competent, engaged them although he might have got, if not absolutely competent men, much more competent men?—The engine-keepers and those there knew that they were not competent and the manager was informed that they were incompetent.

27748. Notwithstanding this information he took the men on?—He seemed to say he believed they were competent. It was a question of his own belief.

27749. You do not suggest that a manager would, as a general rule, or except in the most exceptional cases, deliberately take a man on as an engine-keeper whom he knew not to be competent, when he could get a man who was more competent?—In general cases I believe that anyone would certainly employ a competent man, but I know there was a time in Lanarkshire, at least, when there were hundreds of men employed who were incompetent and many accidents were caused. It was during a trade dispute.

27750. That is to say, the competent men gave notice and left the works and, consequently, there was a great difficulty in getting competent men?—That is so.

27751. Secondly, you wish to give evidence as to the dangerous practice of having other engines, such as electric, pumping and haulage, placed in the same engine-house beside the winding machinery. This is a practice which, you say, is becoming very common in Scotland?—It has always been very common. It is much more dangerous on account of larger machinery being put up. I know one place in Midlothian where there is an electrical engine in the course of erection to drive the coal-cutting plant below, and it is placed beside the winding-engine, which means that the winding-engine keeper looks after that when it is going. In many places in Scotland they have indicators from pumping engines right in front of the winding engine-keeper. The indicator shows that the pump is working right, and in many cases they have a large bar through where the keeper has to attend to it at the same time as he is working his winding-engine. My own brother, in Blantyre, has an electrical engine and the engine went away rather quick, something went wrong with the governor, while he was letting down the men in the morning. He went to put it right, but went back the wrong way in the excitement of the moment. There were no men injured, but there might have been eight men killed.

27752-3. You think it is difficult for an engineman to carry out his duties satisfactorily if there are other engines in the same place?—Yes. I do not know about England, but in Scotland, so far as the Coal Mines Regulation Act is concerned, it is not in any sense observed. I read in the Coal Mines Regulation Act as regards winding enginemen: "The enginemen at the pit-head shall, during the hours of his shift, remain in charge of and so near his engine as, at all time, to have it completely and entirely under his control." It is quite common in Ayrshire and the Lothians and many places in Lanarkshire and Fifeshire where engine-keepers have to fire the boilers, clean the fires and take away the ashes and attend to various other engines. The winding of the engine seems to come in as a secondary consideration. That is where there are men in the pit. I know in Scotland where they have to leave men in the shaft and attend to other engines.

27754. You refer to an accident happening where the engineman did not receive the proper signal or, rather, did not respond to it owing to the noise of the machinery?—I gave these instances because they were of recent date. The fatal accident enquiry in this case has not come off yet. I was apprised of the accident and went to see it. The pit-headman and engineman say the bell did signal, but the bottom-man before he died said he did not pull the bell, and the man with him said so too.

27755. Before long we shall have an official account of that enquiry?—Yes. My experience is that these official accounts never touch the real crux of the matter. It is generally a formal verdict that is given. What I have suggested here is a thing so common that they will not pay any extra attention to it. A pumping engine is thundering on beside that winding engine which drives the washer at the pit head. The engine-keeper has to pay attention to that engine besides putting up with the noise. Then this accident happened and I went up to see the engine going, but I could not say whether a signal was given or not unless I was watching it.

27756. Do you mean to say that these fatal accident enquiries are not carried out as they ought to be?—I mean to say they are not properly looked into as they ought to be or this would not be possible.

27757. Do you mean to say that when a fatal accident happens and you have an enquiry that everything is not brought out with regard to the cause of the accident?—Yes, I believe that.

27758. You are dissatisfied with the enquiries under the Fatal Accidents Inquiry Act?—Yes; I am dissatisfied with it so far as making recommendations and looking into the real matter are concerned. A formal verdict I believe will be returned in this case. It may not, but that is going according to precedent and that is what I look for.

27759. That is a very serious matter. Under the new Act "The Jury shall state the cause or causes of such accidents or death or deaths, the person or persons, if any, to whose fault or negligence the accident is attributable, the precautions (if any) by which it might have been avoided, any defects in the system or mode of working which contributed to the accident, and any other facts disclosed by the evidence which, in the opinion of the Jury, are relevant to the enquiry." If those statutory provisions are carried out, surely you would have a complete enquiry?—Not very long ago, at Houldsworth in Ayrshire, there was held the first fatal accident enquiry under this Act, which I attended. Two men lost their lives and two were injured. It was on account of the water coming in from the boiler. The engine-keeper had been 13 hours on duty when this took place, but the stoker seems to have let the boiler get too full of water, and the dirty water came in from the boiler and blocked up the valves so that the engine-keeper could not control them. The cage went away and landed on the bottom and he was unable to put off his steam when it landed, and that brought away the cage and killed the men. The cause of these men losing their lives I heard read out was that the cage was lifted away. You have to go further back than that to find out how this could be prevented. The immediate cause is one thing and the causes that contribute to the thing are another.

27760. You say the first enquiry under this Act was not carried far enough in your opinion?—I think it should have been carried further.

27761. You consider the finding of the jury did not give an adequate explanation of the whole of the causes which led to the accident?—It did not give any explanation at all of the causes that led to the accident.

27762-3. It seems to me that the provisions of the Act are not carried out if that is so. If the Act is properly carried out it would be the duty of the jury to go into all these matters, and these matters ought to be brought out at the enquiry?—In my opinion the matters are not looked into as they ought to be, and the recommendations are not made as they ought to be at these enquiries. Formal verdicts are returned.

27764. Can you suggest any improvement in the Act of Parliament which will set that right? It seems to me that the provisions are very stringent?—I do not know so much regarding the recent Act; the former Act, at any rate.

27765. This enquiry which you say was not exhaustive was under this last Act?—Yes.

27766. Can you suggest any improvement of the Act of Parliament?—My suggestion would be that the jury should enquire into the contributory causes and the environment and the reason these things can take place. We know how the accident happened, through the cage

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Mr. R. Shirkie. 17 July, 1907.

being lifted away. The verdict was that the cage failed to stop when it went to the bottom. Anyone knows that; but why did it fail to stop? What were the circumstances at the time? If these had been taken note of it would have thrown some light on the matter.

27767. (*Mr. Ratcliffe Ellis.*) Were you present at that enquiry?—Yes.

27768. Did you offer any evidence?—I was there on behalf of the Association, and I cross-examined the witnesses.

27769. (*Chairman.*) You brought all these matters out in your cross-examination?—Yes, I brought out as many as I could.

27770. The jury took no notice of them?—Regarding the manager, I asked how long the engine-keeper was on duty, and he said 13 hours. This question was refused at first, but the judge ruled that he should answer it. I asked, "Did he not think that had something to do with the accident," but counsel for the company said that if I suggested that I gave my case away. I say an engine-keeper who has been on duty for 13 hours, although he may not cause that accident, is not in a position to prevent it, as he would be if clearer and more able.

27771. (*Mr. Ratcliffe Ellis.*) Had you the opportunity of saying all that you wished to before the jury?—Yes.

27772. You took advantage of that?—I took advantage of it.

27773. (*Chairman.*) And the jury apparently in their finding ignored a good deal of what you said. That is, they did not refer to some of the evidence you gave which you think they ought to have referred to?—I do not know the juries think they have to refer to everything, whether they may believe it or not; they have to give, in their opinion, the direct cause of the accident.

27774. They did not go far enough back, in your opinion, in investigating the cause?—Yes.

27775. I cannot imagine myself how the Act of Parliament could be amended in order to meet your views more than it does at present. You brought out this evidence, but the jury did not attribute that importance to it you think they ought?—The Act is satisfactory as regards enquiries into fatal accidents.

27776. But the way in which it is carried out is not satisfactory in all cases?—So far as my experience goes. I have not had much yet; it is quite a new Act.

27777. Then you quote Mr. Mclaren, one of the mines inspectors for Scotland, who says in his latest report with regard to shaft accidents: "This class of accident seems to be on the increase;" and then later on he says "that the accidents were not caused by ascending cages being overwound, but by descending cages striking the bottom too hard." I have his report here, and on page 15 he puts it even more strongly than you do?—I have not his report. I depend upon the newspaper for what I refer to.

27778. The paragraph you apparently allude to is this: "Under the division of overwinding, five accidents are recorded, causing injury to 15 persons; these accidents were not caused by the injured persons being overwound by ascending cages, but by being underwound by the descending cages, and striking the bottom too hard. This class of accident seems to be on the increase, and where there is speedy winding, some automatic arrangement to prevent the descending cage striking the shaft bottom with too much force is a necessity." He is strongly in favour of its being compulsory to have an arrangement whereby it should be impossible for a descending cage to strike the ground so hard as to cause injury to the men?—That is so. It seems rather a difficult thing. I believe this is greatly contributed to by the long hours the men have to work.

27779. Then you mention an accident that happened from a boiler explosion where a stoker had been on duty 36 hours. The manager said the stoker had volunteered to do the extra work himself. The stokers are not in your Association at all?—No. I thought I was required to give evidence as regards accidents, and the stoker is connected with the machinery. This is the West of Fife Coal Company. This stoker—whether he volunteered or not is an open question—is dead now, and my case is that he ought not to have been allowed to work 36 hours on such duty.

27780. You give particulars of cases where the engineman has been more than the ordinary 14 hours on duty. In one case a man had been on duty 20 hours; in another instance occurring in the district where you were employed the winding engineman had been three shifts on duty when he overwound the cage, and seven men were killed and one injured?—That is not a recent accident; that is some time ago. That happened in Blantyre. The manager afterwards told me (he is a very particular man) that he would not allow his engine-keepers to work three shifts after that.

27781. There are means of preventing overwinding—I mean mechanical devices by which it can be made impossible?—Yes; but these are conspicuous by their absence in most of the collieries in Scotland.

27782. You think it ought to be made compulsory to have machinery to prevent overwinding?—Yes.

27783. Then in paragraph 4 you say that enginemen have multifarious duties to attend to. You give various instances of that. You have told us already that you think enginemen should only have the one duty to attend to, namely, the duty of attending to the winding engine. You think, for instance, that he should not have any stoking duties?—He must go out of the engine-house to do stoking duties. I may mention a case in Ayrshire, where the engine-keeper was attending to the boilers and the water seems to have broken down below underground, and two men came to the bottom and signalled to get up. There was no answer, because the engine-keeper was attending to the fires, and, as is usually the custom, the engine-keeper finished the duty before he went to the engine, and when he went there was no signal, and it happened that these two men there lost their lives through no one being there to attend to it.

27784. Then you summarise what you want under four heads: First of all you require certificates of competency for enginemen and firemen. You would have a different examination for firemen and enginemen?—Certainly.

27785. Then, secondly, you recommend that only the winding engine should be allowed in the engine-house in which it is working. That you have explained. Then you recommend that the hours of winding enginemen should be regulated by Act of Parliament. You go rather further than that, and say that they should not be allowed to work more than 9 or 10 hours in the 24?—I would say so.

27786. Then you recommend that the Coal Mines Regulation Act should be amended so as only to allow the winding engineman to attend to the winding engine during the time that men are employed in the mine. I think you have sufficiently explained that. Those recommendations, I suppose, are recommendations approved of by your Association?—That is so. There are two other matters I want to refer to. One is the sanitary arrangements in engine-houses, and the other explosives being kept in engine-houses. Explosives being kept in engine-houses is a recent matter. It has been a great grievance of our members with regard to explosives being there, besides the men coming in and out to get them. The mines inspector said he did not believe it was the proper place to keep them.*

27787. What inspector told you that?—Mr. Robert McLaren.

27788. He said that he had no power to prevent explosives being kept there?—To prevent them being there; he said he did not believe it was the proper place for them.

27789. That is contrary to the law. It seems that the Act of Parliament is not attended to as regards the explosives?—You would think that the mines inspector should be able to give a proper interpretation. I have the letter that he sent on this matter, although I have not it with me, with regard to detonators and those things. It is a common thing. At one enquiry I attended it was brought out that explosives were kept in the engine-house and under the house also. One engine-keeper was dismissed because he complained of it.

27790. Complained of these explosives being stored?—Under the engine-house.

27791. What sort of explosives were stored?—Just the usual explosives for the underground workings.

27792. As to a small quantity of explosives being stored it might not be a breach of the Explosives Act?—I understand what is kept in the engine-houses are small quantities

(*Mr. Smillie.*) They are brought from the magazine and placed in the engine-house and distributed from there to the men going down.

* Mr. Shirkie subsequently informed the Secretary that he had communicated with all the Branches of his Association, and had ascertained that though the practice referred to was prevalent a short time ago, there are now very few places where it has not been discontinued.

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27793. (*Chairman.*) Are they brought in such quantities as would be a breach of the Coal Mines Regulation Act?

(*Mr. Smillie.*) I think not, but it is improper.

(*Witness.*) That is what Mr. McLaren said.

27794. What do you object to in the sanitary arrangements?—In Scotland there is no such thing as sanitary arrangements connected with engine-houses. It is something very distressing to see the state that first-class engine-houses are in as regards this. Offices and other places have lavatories and conveniences, but the engine-houses are entirely destitute of them. Even about the colliery you do not find such a thing. I just wanted to bring it before your notice; not only is it for the convenience of the engine keeper, but it is necessary to allow him to be in a proper state to do his duties.

27795. What is the case in England?

(*Mr. Enoch Edwards.*) It is very imperfect everywhere. They never give a thought to it.

27796. (*Chairman.*) Do you suggest some sanitary arrangements should be made compulsory within a certain distance of an engine-house?—I would suggest at least a recommendation that it requires to be brought to the coalowners' notice. I do not think they would say much against it.

27797. You think it ought to be brought to their notice?—Yes.

27798. Why do you not mention those matters to the inspector?—When it comes to that it means to say that it would be required to be enforced, and the inspector can only recommend.

27799. You do not think that the managers would be averse to having this accommodation provided if they knew that it was desired. Could you not go to them and say that you desired it, or if you preferred you might go to the inspector and ask the inspector to suggest to the manager that it would be a good thing?—I said I did not think they would object. There is very little cost in it.

27800. Why do you not ask them?—We have asked: I have mentioned it many a time.

27801. What do the managers say?—That it was not at any of the others.

27802. Therefore they would not be the first to begin. Have you made representations to the inspector and asked him to make representations to the managers? They could probably get them all to do it?—I would not like to say.

27803. At any rate, you think that is a matter which requires attention?—Yes.

27804. (*Mr. Ratcliffe Ellis.*) What is the experience required in the examination for enginemen in the Transvaal?—Of course, it was a new country to a certain extent, and when I went out to the Transvaal I had to have letters, that is certificates, from my employers in Scotland. They granted me a permit on the ground of these certificates until my examination would come off. They sent me a list of the engines and the boilers that I was required to show my experience of, that is the experience of the engine to know the working of the steam.

27805. They give you written papers to answer?—No, it is all verbal.

27806. They do not give you a certificate because you go before the Board and answer questions unless they are satisfied that you have had practical experience in working the engines?—Yes, in the Transvaal.

27807. Have you the regulations of the Transvaal here?—No.

27808. What length of time do they require you to have experience at an engine?—I think at that time it was two years. I do not know that it was necessary to be two years' winding; it was two years' experience of that kind of work.

27809. What sort of experience?—Such as mine managers. They have to have a certain time in touch with this work before they are eligible to be examined.

27810. Will you consider the winding men? Do they require you to have had two years actually at a winding engine?—I do not remember. I think it was two years' winding you were required to have.

27811. Do you think it would be desirable to give a certificate to a man merely because he understood the construction of the engine, without his having had some experience as a winder?—No, I would not think so. He ought, at least, to have had the same kind of experience as the mine managers have.

27812. That is a different experience. One has to manage the mine, and the other has to wind?—It would require to be on different lines.

27813. There should be a period of apprenticeship, or some period spent at the engine to qualify for the work?—In touch with the work.

27814. You have 95 per cent. of the winding enginemen in your Association in Scotland. How many of those men do you think would pass the examination you referred to in the Transvaal?—I do not know. In the Transvaal, when it came into force, they got a service certificate.

27815. How many do you think could now pass that examination?—I do not know. For the want of that we have a great many men winding that have not got the necessary experience in other ways with their engines.

27816. You do not know how many? Do you think any of them could pass it?—Yes.

27817. What percentage of the men could pass that examination?—The examination I passed in the Transvaal I believe about 60 or 70 per cent could pass.

27818. At least half?—I think so.

27819. Are the other half incompetent enginemen?—I do not believe that they have the knowledge of the machinery that they ought to have when they fill such positions.

27820. The half who could not pass that examination do you look upon as incompetent enginemen?—Not as far as turning the handles and one thing and another are concerned, but I do not look on the engine keepers as having the knowledge they should have of the machinery.

27821. Do you look on those men as incompetent, and consider that it is unsafe for them to do the work they are doing now?—In cases of emergency I believe that knowledge is necessary as well as the experience.

27822. Can you say in your view that 50 per cent. of the men could not pass that examination?—I did not say 50 per cent.; I said about 60 or 70 per cent. could pass.

27823. Do you think that those who could not pass are not competent to discharge their duties safely?—I do not believe they are as competent as they ought to be.

27824. In the Inspector's Report for last year there are no fatal accidents from over-winding: there were five accidents causing injury. Do you think that a bad record in a year with more than 1,900 enginemen, because there is another five per cent. who are not in your Association?—I did not say there were 1,900 winding enginemen. I do not know that. Over half are winding enginemen.

27825. I will take 900, and five per cent. on the top of that. Do you think, looking at the fact that last year there were no fatal accidents, and only five non-fatal accidents, that justifies you in suggesting these men are not competent to discharge their duties?—It is not as regards the proportion of fatal accidents we ask this. We believe the fatal accidents are not a true criterion to go upon.

27826. I am taking the fatal and non-fatal accidents in last year. Is not that a very good record?—You might apply the same to all others, such as mine managers, or dentists. You might say there is no need for certificates.

27827. I should like you to keep to the engine-winders?—We must consider precedents.

27828. The question is as to the competency of the present winders. Do you think the fact that out of millions of windings in that year up and down the shaft there are no fatal accidents and only five non-fatal accidents is a record which justifies you in coming to the conclusion that the men who do this work are not competent?—I said not as competent as they ought to be. I said that these men while in that very responsible position cannot have too good a knowledge in cases of emergency—that is, if cases of emergency arise. The engine-keepers are not there to cause accidents, but to prevent them. I believe this is a thing the miners and officials know very little about—the very narrow shaves that take place.

27829. That shows that they must be equal to the emergency?—It does not show it entirely.

27830. I think it shows it conclusively. You say there are a great number of close shaves which they manage to escape. That shows they are equal to the emergencies?—The law ought to be that no men but those who are competent should fill these positions.

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Mr. R Shirkie. 17 July, 1907.

27831. I am suggesting that the fact of having escaped these narrow shaves, which you say so frequently happen, and the fact that no fatal accidents occurred and only five non-fatal accidents, show that the men who are discharging this work are competent men?—It shows practically that that is so, but I say that even this proportion of accidents justifies the request.

27832. I want to go a little further. You support, I presume, the Bill that is presented from time to time to Parliament for the certificating of engine-winders?—Yes.

27833. It is one of your principles that no person who has not a certificate should be allowed to wind at all?—That is so.

27834. Have you the Rules of your Association with you?—Yes.

27835. Will you refer to the part with reference to the teaching of winders? What is your regulation as to that?—They get as a haulage member into the Association, then they pay £2 for instructions to wind, after they get the consent of the manager or owner of the colliery.

27836. Is there a regulation of your Association that the winding engine-man is to decide whom he teaches?—No.

27837. Is it a violation of the Rules of your Association if he teaches a person who is not a member of your Association?—Yes.

27838. In your Association the winding engineman is not allowed to teach a man who is not a member of your Association?—That is so, that is an apprentice. In our Association a winding engine-keeper is quite at liberty to show another winding engine-keeper anything regarding the machinery.

27839. Will you read the stipulation which prohibits a man teaching a person who is not a member of your Association?—That is so; I do not need to refer to it.

27840. Will you read it, to get it on the Notes?—This is 3, Admission of Members: "Any person desirous of becoming a member of this Association must be proposed and seconded by two members who must be satisfied of the applicant's qualifications to become a member before proposing him. Applicants will be qualified to be admitted as winding enginemen who have been performing duties for a period of three months. Applicants will be eligible to be admitted as haulage members of this Association who have been employed on pumping, haulage, locomotive, fan, electrical, or other machinery, for a period of three months. Applicant must produce a medical certificate of good health before he can be enrolled in the books for full benefits. Every member on entering this Association shall declare his adhesion to the principles and objects of the Rules, and shall support and advance the interests of this Association, and the objects thereof, so long as he continues a member."

27841. Will you go to the part about the limitation as to the persons who may be taught?—I do not know that there is any limitation put down as to the persons who may be taught. £5 they pay for the instructions.

27842. You told me just now that the winding engineman was the man, according to your Association, to decide whom he should teach?—The Association decides whom they teach.

27843. Supposing the manager of the mine took a person into the engine-house and said "I want this person taught," is he entitled to say "I will not teach him"?—We have had very little difficulty in that way.

27844. According to your Rules can he do so?—It all depends. If he wants to take him in in the proper way, according to the Rules of the Association.

27845. Can a manager say "This man must be taught"?—No.

27846. Why not?—Simply because it is a violation of the Coal Mines Act.

27847. It is not. Is it a part of your constitution that you would prevent a person being taught who was brought by the management, unless you approved of it?—Yes.

27848. Why is that?—Because it is the Rules of our Association.

27849. Supposing this certification came into operation, a man could not get his certificate unless he had been taught?—No. A man before he can get his certificate would have to be taught at the engine, and he could not be taught except your Association permitted him to be taught. Therefore your Association would control the persons who would be entitled to wind men up and down the pit. That would be the result?—I cannot say that follows. You might as well say a manager could not get a certificate except some of the rest of them taught him.

27851. Will you deal with the enginemen first? Would not that be the result? If your views were carried out your Association would decide as to the person who should wind people up and down the pit?—No, I do not think so; not entirely; it would to a certain extent.

27852. To what extent would it not? If you can prohibit a man being taught you can prohibit a man getting a certificate?—No. This man needs to have experience in connection with the work. He needs to be working about it and understand what an engine is, and boilers, and so on. It is not necessary that he must have been winding. With the experience he has in the time he has been there he can pass the examination.

27853. Do you think it would be safe to have a man get a certificate and qualify who had no experience at engine winding?—If that was a hard and fast rule, where would it end?

27854. I am asking you. I do not know where it will end. Do you think it would be a safe thing to give a man a certificate and authorise him to go to the Transvaal to get a place as a winding engineman if he had not actually wound?—I say it would. I say he has practical knowledge, he has experience, and he has a certificate which would enable him to call himself a fair engine-keeper. He only requires practical experience of winding.

27855. When is he to get that?—When he has had the other experience.

27856. After he has the certificate?—No, before he gets the certificate.

27857. You are going to prohibit people being taught winding?—No.

27858. You say a man cannot be taught in the engine-house unless your Association approves of it?—The men must approve of everything that happens in that direction. Someone must approve of them.

27859. I say the manager is the man to say who is to be taught?—My experience is that it is not so.

27860. It is not if you can prevent it?—If certificates had to be got it would be an easy matter in having arrangements made whereby men could be taught, and the Association have not all the say.

27861. If your Association are to prohibit people being taught it would be an easy matter for you, because you could limit the persons who are winding engines to the persons who had got certificates?—The Association is not all-powerful in that. Managers could teach any man they wish to teach. It is only a question of "Do not ask me to do it."

27862. Why should he not ask you to do it?—Surely I am to have a say in it.

27863. You are to be paid?—Am I to do anything, whether I believe it is right or wrong, simply because I am paid?

27864. Your view is that you should say who is to be taught?—I did not say so. To give a case, in Bathgate two members were approached by the manager: "Would they teach this man?" He was a friend of the manager, and wanted to learn. They said "We are willing to teach him, but he will have to come in the proper way that all the other apprentices come."

27865. What is that way?—He would have to come to the Association. I am only giving this case as matters stand. The manager said they would have to do it. I was asked to look into the matter, and I told the manager they would not do it except he came in the proper way. This was only a matter of winding to trample on the rights of the men.

27866. It comes to this: you claim your Association shall say who shall be taught?—That is not so. The manager said: "Have you to tell us who is to work the winding engine?" and I said "No." He said "Can I take that man and get him taught?" I said "Certainly you can, if you wish to; you can teach the man at any time," but if any man is on duty you cannot teach him.

27867. You do not teach when you are winding?—No. I said "When the engines are working we cannot interfere, but you can teach him."

27868. The manager could teach him?—Yes, or get anyone to.

27869. What do you do with a person who is a member of your Association who is going to be taught?—We get the consent of the manager.

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27870. Having got that what do you do in the engine-house with him. Do you allow him to be with you ?—Yes.

27871. To teach him about the engine and show him how to wind ?—Yes.

27872. That is what you will not do to a person who is not approved by your Association ?—Certainly.

27873. Take the case you refer to in your notes where there is a dispute between the manager and his winding enginemen and these enginemen left. What was the dispute about ?—I do not know.

27874. However, they left ?—It was with the Association.

27875. Supposing that manager could not have got anybody to wind except with the sanction of your Association, what would he have done ?—That is supposing a case which really does not exist. This manager actually did settle up and the men got their grievances redressed after these accidents happened.

27876. If it is necessary for safety that the men should have certificates, that is one thing, but would not the result be, if no person was allowed to wind except men who had certificates, that they could compel any arrangement they thought fit, otherwise there could be no access to the mine ?—No, as circumstances obtain it would have the same effect as if certificates were granted. If we had that power you put forward, certificates would not help us in that power. If we have it we have it without certificates.

27877. It would help you in this way, there are many men not in your Association who can wind, but if a man is not allowed to wind without a certificate, and they could be only got by your Association teaching people, you would have all the people who could wind in your Association ?—We have mostly all in Scotland already, and if this state of matters was the case which you have pictured, it would be the case apart from certificates.

27878. In case it should be considered necessary for safety that there should be certificates, would you object to such restrictions in the Act to prevent such a thing happening ?—I would have no objection to that.

27879. (*Chairman.*) You mean a manager can now teach a man. You cannot prevent a manager teaching a man ?—No.

(*Mr. Ratcliffe Ellis.*) There is no use in a manager teaching him, he wants to be taught by a man who understands it.

27880. (*Chairman.*) If the manager could get him taught in any other way and the man was capable of passing the examination, he could get a certificate whether a member of your Association or not ?—Yes.

27881. However, you are prepared to go further than that and say that you would not object to an Act laying it down that you should not have exclusive control over this matter ?—I would not have any objection to a matter of this kind, not entirely confined to ourselves and submitted to arbitration or a Court of that kind. I do not think that is our object to get more power over this.

27882. (*Mr. Ratcliffe Ellis.*) At any rate, there should be some provision that in such a case access to the mines might be obtained by persons other than certificated enginemen. There are not more than 5,000 winding enginemen in the country ?—I do not follow your last statement.

27883. There are not more than 5,000 winding engine men in the country ?—The statement you made before that I mean.

27884. Supposing the time came when the pits could not be got access to because the certificated enginemen would not work, a provision might be made by the Home Office, that access should be got by uncertificated enginemen. One clause in the Bill is that no person who was not certificated should be authorised to wind ?—I do not think there would be much wisdom in going that length. You would place men on whether they had experience or not.

27885. It might be necessary ?—Of course, but that is very improbable.

27886. You would have no objection to having provision made ?—No, a provision of some kind.

27887. With reference to the time of the men at present engaged during the night when coal is not being wound, is there much for the engine-winder to do ?—Yes.

27888. What has he to do ?—During the night is the time when they repair the shafts. There are very few places, but there are two or three other engines to attend to. The packing of the engines has to be done during the night; the cleaning takes place during the night. We have had conferences with the coalowners of Scotland, and it has astonished me because they seem to think the man has nothing to do at night.

27889. There is nothing like the strain on him as there is during the day ?—At night, having so many other duties to attend to, I think there are more accidents than during the day when actual winding is going on. He is attending to other things during the night.

27890. Do you think there is the same strain in the night when there is no coal being wound as there is in the day when the engine is going full speed and winding coal the whole time ?—I believe there is more responsibility in this way. There are more men handled at night than during the day.

27891. You have been an engine-winder. Is there the same strain at night when coal is not being wound ?—Yes, as far as my own experience is concerned, there was a strain on me when I was winding men.

27892. Exactly ?—You handle more men during the night. There are so many more things to attend to, and it is men, men, men all through the night.

27893. You think there is such a strain on a man ?—Yes.

27894. You would not approve of having a longer shift in the night ?—No.

27895-6. Have you taken any note whether the accidents which occur happen in the later hours of the shift of the winding enginemen ?—No; my opinion is that they do happen later in the shift, but I have not taken any note of it.

27897. You say after the hours you had to wind you felt too done up to be quite at your best ?—Yes, I have no hesitation in saying that.

27898. Can you fix any time that should be the time. You think 12 hours is too long ?—Yes.

27899. What do you think should be the time ?—I think it should be eight hours, three men on each colliery.

27900. Why this mention about eight hours ?—It is because there is no other practical way with colliery engine keeping. It requires men to fill in the whole time, therefore two are too little, and to divide it into three it requires eight hours.

27901. Is there no difference in the engine ? Would you not make a difference where there is a big engine and a large output and where there is a small engine and a small output ?—I do not think you can. You cannot do it so far as care and responsibility are concerned. Where you have a large output you have a large engine and you bring up so many more hutches at the time and the engine is generally slower. It has a larger drum and the engine goes slow. Where there is a small output and small plant, as a rule, you get the enginemen more taxed at that small place than the large place.

27902. In your view there is no difference in strain whether a big place or a small place ?—That is generally my view.

27903. You wanted to mention in connection with certificates for winding enginemen, certificates for colliery managers. You look upon them as on the same line ?—Yes.

27904. Do you know any association of colliery managers which prohibits a man being taught his business ?—I do not know any just now, but I suppose there to be one.

27905. You have not found any lack of certificates ?—So far as prohibiting is concerned, I do not think there is any difference between the certificates for winding, or what should be for winding, and for the manager.

27906. You know now, and we have heard before the Commission that there are a great many men with first-class certificates working at the face ?—I believe that.

27907. There is no limitation as to the persons who may be taught there ?—There are a great many winding engine-keepers working at the face who have no certificates.

27908. Are they competent men ?—Yes, a great many are competent men.

27909. In an emergency they could be got to wind ?—Yes; I believe there are very few districts but where there are two or three dozen men working at the face.

27910. That is all right now, but if the law was passed prohibiting the winding of men except by certificated enginemen it might be very mischievous ?—If this law

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Mr. R. Shirkie. 17 July, 1907.

was passed, and it was seen that a great mistake had been made, surely they would be equal to the emergency and pass another law.

27911. It is safer not to pass this law?—It is easy to put in difficulties, but at the same time I do not know that there will ever be a limit so far as law-making is concerned.

27912-3. Will you give the name of this colliery where this manager was left without winding enginemen?—Wallyford Colliery, in Midlothian.

27914. (*Mr. Smillie.*) Is there any real dearth of engine-winders in Scotland at the present time? Have mine managers any difficulty in getting an engine-winder at the present time?—Not that I know of.

27915. Does your Association desire to limit by this certificate the number of winders?—No.

27916. Is that your aim, or is it safety?—Safety.

27917. We want to be clear on this; there is a feeling that you are aiming to get hold of the mines of the country?—No.

27918. Is it really for the safety and well-being of the engine-winders that you desire a certificate?—Yes.

27919. In the event of it being passed into law that a certificate of competency must be held, would you object to engines being used in different parts of the country for training men in different parts of the country for that purpose?—No.

(*Mr. Ratcliffe Ellis.*) Will you have pits, too?

27920. (*Mr. Smillie.*) Yes, at any of your present collieries. I am asking, would your Association object to a system of training engine-winders at any of the existing pits outside them altogether? I want to know if they object to the making of enginemen. We do not want to assist them in that direction. At the present time your rules have been drawn up in order to secure competent men?—That is so.

27921. Had there been a law providing for certificates of competency, those rules would not be necessary?—No.

27922. I mean the safeguards put into the rules. Have engine winders' rules tended to secure competent men?—Yes.

27923. No attempt was made by anybody outside the men to do that?—That is so.

27924. Would you accept a person members felt was not a competent engine-winder?—No, we have that in our rules.

27925. That is the reason for this being in your rules?—Yes.

27926. The Scottish winders, so far as you know, are quite as capable winders as in other parts of the country?—Yes, we get that verdict from those who are in a position to know them all.

27927. To a great extent you think it has been the provision of your rules which made those men competent?—I am certain of that. I have no doubt, personally.

27928. At one time there was a considerable number of engine-winders known as tramp winders. Are there still some?—There are some, but they are a diminishing quantity.

27929. That is men who are not steady men, and shifted from place to place?—Yes.

27930. Those men were often engaged without much enquiry as to their competency?—That is so; they served just for the time being.

27931. In addition to the accidents you mentioned, you remember a considerably larger number than you have dealt with here? Do you remember the accident which took place at Swinhill Colliery through incompetent engine-winders?—Yes.

27932. That was a case in which the winders were on strike?—Yes.

27933. An incompetent winder who had never wound before was employed without enquiry?—Yes.

27934. That came out at the enquiry?—Yes, the cases I have given do not exhaust the cases. It was a recent occurrence.

27935. Have you known a manager held responsible in the law courts for engaging an incompetent engine-winder?—No.

27936. If an accident arises from an engine-winder being incompetent, is not the engine-winder himself held responsible?—He is fined.

27937. Not the manager?—*No.*

27938. What are the wages of the engine-winder in Scotland?—5s. 7d. per shift, just now 5s. 8½d. with this last rise.

27939. That is seven days a week?—Yes.

27940. (*Mr. Enoch Edwards.*) How many hours per day?—Twelve hours.

27941. (*Mr. Smillie.*) You do not consider that is a wage that is likely to encourage the very best class of men?—That is not. That is the reason so many men are at the face.

27942. You have a considerable number of skilled competent enginemen working in the face at the present time?—A considerable number.

27943. Earning considerably higher wages than they can at their employment?—That is what makes them leave the engines, the long hours and the small pay.

27944. Are there any of the collieries in Scotland at which the hours of the engine-winders are only eight hours per day?—I think there will be three pits: but this is the thing; that is given, but not recognised from head-quarters; the managers have arrived at the conclusion it suits them better to have this.

27945. This strain on engine-winders has increased very largely?—Yes, and is still increasing.

27946. At some of the collieries the engine-winder, from the time he starts work till he finishes, scarcely ever leaves the handle of his engine?—That is so.

27947. There is not a moment that his mind is not strained?—That is so. In a good many collieries they wind two shifts.

27948. Some of your collieries have two or three landing places in the shaft?—Yes, the majority of them have different bottoms.

27949. Where they are working out seams?—Yes.

27950. There is a different bell in the engine-house for each of those bottoms?—Yes.

27951. The engine-winder not only requires to pay attention to winding, but also four different signal bells from four different bottoms?—That is so.

27952. From the mid-bottoms he must also pay attention to the signal which indicates that the gate is closed or open?—That is so. That is a part of the duty he is bound to do. I have known two cases where engine-keepers were fined for that indicator being out of order and not reporting it, not seeing the gate working properly.

27953. Do you know if there are many engines which have the Vizer apparatus for stopping the engine in the event of the man neglecting to do so?—I do not know of any.

27954. Do you know Douglas Water Collieries?—No; I have been in the district, but I have not been in the collieries.

27955. Do you know the Vizer apparatus?—No.

27956. From your experience as an engine-winder you tell us on many occasions that you yourself have been almost on the verge of causing accidents. Would you agree if there is an apparatus that will stop an engine before the cage went to the pulley, shut off the steam and stop the pulley, that it should be attached to all engines?—It seems to me a difficult matter. Supposing a cage is coming up and steam is shut off, unless there was an apparatus to apply a brake ——?

27957. You do not know the apparatus?—No.

27958. If it was proved that there is an apparatus to shut off steam and apply a brake and prevent overwinding or underwinding, knocking the cage to the bottom, should it be attached to an engine?—Yes, certainly.

27959. With regard to the Fatal Accident Inquiry Act, I am concerned a bit about that. You have full power to ask all necessary questions?—Yes.

27960. Have you power also to call witnesses?—Yes.

27961. Have you ever done so?—Yes, on one or two occasions we nave had witnesses. I do not understand what you mean. The witnesses connected with the actual accident or witnesses connected with the arrangements of the working of these plants?

27962. Any witnesses you have that would be useful in bringing out clearly the cause of the accident?—I do not know whether we have that power or not.

27963. The custom at the present time is that the Procurator Fiscal is responsible for calling all the witnesses,

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and he may not call certain witnesses you might think were necessary in order to give information ?—Yes. Not only so, but in many cases the most important witnesses in that direction have been omitted.

27964. If you had known you yourself could have called them ?—Certainly.

27965. You get no information as to who is being called ?—No.

27966. You often find in Court the witnesses who could really throw the most light on the matter have not been called at all ?—That is so.

27967. You are entitled to address the jury and ask them to add something to their verdict ?—Yes.

27968. Did you do so in this case ?—No. That is the Holdsworth case.

27969. I do not think any law can force the jury. This law empowers them and instructs them that they are not only to find a verdict that an accident has taken place, and where, but to deal with the cause ; I mean the Act as now amended ?—I have not seen it done. It may be the case.

27970. You are aware under the previous Act the Sheriffs in many cases tell them they had nothing to do with the cause ?—Yes.

27971. But the Act is now amended, and puts the onus on the jury to deal with the cause where anyone is to blame ?—I understand that is so.

27972. You object that the jury do not do it ; they merely return a formal verdict. You could not suggest further powers than we have at the present time ?—I think the powers are very good. My experience, at any rate, is that juries are often made up of men who cannot understand the working of these things. I find a great difficulty in these cases to get any of them to understand the real working of collieries or the machinery of the collieries.

27973. Your experience is that seldom is a miner or an engine-winder called on the jury of any of these Fatal Accident Enquiries to enquire into those accidents ?—I do not ever remember a miner or an engine-winder being called on juries.

27974. I do not know whether you are clear on this point or not, but Mr. Ellis put it to you would you object to some provision being made in the event of engine-winders having disputes, that Parliament or the Home Office, or some other body, should have the power to put on non-certificated winders for the time being ? Did you mean that you were willing that should be done ?—I did not say I was willing that should be done. I do not see how that could be done to be consistent with the reason. I said I would have no objection to some provision to be made binding on both parties.

27975. Did you mean you would have no objection to the training ?—Yes.

27976. You never intended to convey you were willing that non-certificated men —— ?—No, I do not think I said anything to lead you to believe that.

27977. You will find, when you get the notes, you did say that, although I do not think you meant it in that way ?—If the notes are taken properly, this note will be taken, that I never meant anything of the kind.

27978. (*Mr. Ratcliffe Ellis.*) That is to say, under no circumstances must there be any provision made that other than a certificated man must wind at an engine?—That is a different mattter than the way you put it before. That was in the event of a dispute calling uncertificated men—under no circumstances. An accident might occur, the engine keeper might himself meet with an accident.

27979. There might be a dispute, the pit might be destroyed in consequence of people not being able to wind men up and down and look after the pumps ; the place might be destroyed, and unless there is some provision by which an owner can get access to his mine he would be absolutely in the hands of the certificated enginemen ?—The owner has always access to his mine. I do not see that we take any unreasonable stand. If, as Mr. Smillie put it, uncertificated men would be called, I think the whole thing would be a sham. There would be no use for certificates at all.

27980. (*Chairman*). Except in cases of emergency ?—Yes, that is so.

27981. If the engineman suddenly fell ill, and it was necessary, the men should be taken up at once ?—That is so.

(*Mr. Smillie*). You do not object to a provision being made in a case of that kind ?

27982. (*Chairman.*) You would personally not object, whatever your Association might say, to an Act of Parliament providing in the first case in clear cases of accident or emergency, that anyone capable of working the engine should work it, and probably to some other further provision to prevent the flooding of the mine, or serious damage being done to the pits resulting from a strike ?—We would have no objection to provisions to be made so that we should not have complete control, that we should be bound by as well as the owners.

27983. (*Mr. Ratcliffe Ellis.*) That you should have no control ?—No control over our own labour.

27984. Yes, but I say you should not control other people's labour ?—We do not wish to do it. If they want us to teach men we have to do it.

27985. (*Mr. Smillie.*) You do not want to control the engine or the engine house, except when you or your members work the engines ?—That is so. We have nothing to do with controlling the engines.

27986. You object to the manager telling you that you must teach this person ?—Yes ; we look upon it as an abuse, and often used in a way that is not conducive to fairplay at all between the employer and the employed.

27987. What proportion of managers are capable of winding ? There must be a considerable number ?—I believe of those I have come across there will be about 20 per cent.

27988. Capable of teaching winding ?

(*Mr. Ratcliffe Ellis.*) The manager would not be allowed to wind.

(*Mr. Smillie.*) Unless he had a certificate.

(*Witness.*) Suppose the certificate came into operation to-morrow. I do not suppose a man would not be allowed to do what he wished with his plant, so long as there were no men in the mine.

27989. (*Chairman.*) He can go down himself ?—It is a question of life ; it is not a question of plant.

(*Mr. Ratcliffe Ellis.*) The Bill says that persons are not to be put down or raised up except by certificated men. If there was such a law in the interests of the safety of the property there should be some restriction upon that law in the case of emergency. You agree with that. I say that emergency should extend to cases where enginewinders and colliery managers have a dispute, and where the certificated men would not wind he should be able to get somebody else to wind.

(*Mr. Smillie.*) The witness objects to that.

27990. (*Chairman.*) There would have to be some exceptions ?—How can we do anything else except object on the ground of unreasonableness ?

27991. (*Mr. Smillie.*) There is an examination every 24 hours of part of the machinery ?—Yes.

27992. Can you give any information as to how that examination is made ?—If I express my opinions—I suppose I may ?

27993. Yes ?—I believe it is pretty nearly a sham altogether, because those winding engine-keepers that have to make these examinations have no time to make them in the general run of cases. They have to report upon the boilers and the headgear, and all these things. In many cases, in fact the majority of cases, they cannot do anything but run round about them, and in many cases they do not even get a time to run round about them. I have some cases here sent by members complaining of that. There is one in Harthill district, where the engineman said he could not examine, and reported defects. The engine-keepers, I believe, ought to be cleared from this. A competent man ought to take this in hand, because many engine-keepers get victimised when reporting defective machinery. They are told if they cannot work with it others can. That is putting in the Report Book.

27994. If they put in the Report Book that there is something wrong, and they want it put right, they are told if they cannot work somebody else will do it ?—In many cases that is so.

27995. Have you ever had complaints from your members that they were not supplied with the wherewithal to keep their engines in a proper state, such as packing ?—Yes, many a time.

27996. That handicaps the engine-winder, too ?—Yes. It is quite a common thing to look for packing in other places.

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Mr. R. Shirkie.
17 July, 1907

27997. How is the examination of ropes, sides and shaft made? Is it a thorough examination as you understand it is made to-day?—I believe in some cases it is thoroughly done.

27998. Is there any place you feel it is not thoroughly done?—I believe in the majority of cases it is not done at all.

27999. The engine-winder's only knowledge of that is that he is lowering the men who do it?—Yes.

28000. The rate at which he lowers them makes an examination impossible?—Yes.

28001. Accidents may arise because of the want of that examination being made?—Yes. I have known cases where the rope was supposed to be examined every day. I know one case in Blantyre when the rope was thoroughly examined there were broken wires all over the rope. It had been going on, but it was never examined.

28002. That is a breach of the Act?—Yes. This Report Book is a breach of the Act, too, but this is only to show that it is not looked into so carefully as it ought to be.

28003. There are a considerable number of mine owners and managers in Scotland who are particularly anxious and do their very best to carry out in its entirety the Coal Mines Regulation Act. The complaint is that it is only at some collieries where carelessness exists. Generally the management are anxious to carry out the provisions of the Act with regard to safety?—I believe, in justice to them, there are many of them anxious to keep things straight and safe. I do not know that I can say the majority.

28004. A considerable number?—Yes.

28005. You do not complain of all mine managers?—No.

28006. (*Mr. F. L. Davis.*) Do you seriously say the owners or managers are so blind to their own interests that they do not supply the enginemen with proper cleaning materials or packing?—I say that is so in some cases, but it is not in the majority of cases. It is actually the case in collieries that they do not supply them even with waste to clean the engines.

28007. When the man complains that his engine wants looking to, he is told if he cannot work it somebody else can?—That is so in some cases, but I do not say that is in the majority of cases. I say it is possible at the present time, and is done at the present time. I have a case of a man who was victimised at South Rigg in this district, that is Harthill district, some years ago, for reporting a defect of machinery in the book.

28008. Is it 20 years ago?—It cannot be anything like 20, because the man who writes is not much over 20, and he remembers it. He was victimised, that means dismissed, for reporting this defect of machinery, and wanted to make something out of it. He approached the mines inspector, whose attention was drawn to the matter, and all the satisfaction our member got from him was that probably a solicitor would take up the case. He was victimised, and at many of the collieries round about he could not get a position. That man had to leave the district because he reported a thing that was actually the case. I have numerous letters here. Not very long ago I had a letter from one who had attended winding engines, and the engine-house was not very well covered. He had put the brake down, but the cage was at a seam in mid shaft, and some men got on while he was attending to the winding engine, and the brake was defective, and the engine went away and caused a little accident. That man was dismissed, and he had over and over again reported that as being the case, that the brake could not hold the cage when there was a load on.

28009. That seems extraordinary. I should have thought in both cases there must have been something else we do not know of, because it seems to me against the interest of the owner and the manager?—It does, but at the same time you find many strange things you are not able to account for.

28010. You say you have no objection to the manager teaching anybody he likes winding. Do you see any difficulty in his doing that? Supposing the manager has a certificate, and certificates are compulsory, is there any difficulty in doing that?—No, I cannot see any difficulty.

28011. It would be difficult to teach them when the colliery is in full work?—Yes. There is a day every week when there is no work at the colliery. At night there are many pits where there are no men down the mine.

28012. If the manager took charge of his winding engine, the man whose proper shift it was would be deprived of his work?—No; there are a great many shifts where there is only one man during the day.

28013. You are trying to arrange for an 8-hours' shift for three men, 24 hours for each engine?—That is where the pit is double-shifted. We could not ask to put three men on where only one is required at present. The pit is single shifted. We know single-shifted pits, that work during the day and do not require men during the night, and there is no engine-keeper there during the night. We could not have three men in a case of that kind.

28014. The great majority of your pits in Scotland, I take it, have a lot of work at night?—That is so; the great majority have.

28015. You do not think there would be any difficulty about the manager saying "I want the engine-house to teach somebody," and the man whose ordinary shift it would be would be told that he was not wanted. He would be a shift short in that week?—I think that is rather a far-fetched thing, because at most of the collieries there are pits single-shifted.

(*Mr. Ratcliffe Ellis.*) This is a repairing shift.

(*Mr. F. L. Davis.*) There are not collieries in our district in that position.

28016. At any rate if the manager wanted to teach the man, he does not require to ask the engine-keeper, supposing he is on duty, to allow him to do it. The manager has only to put the man out of the mine and he can use the engine as he likes.

28017. Your certificated engineman is not going to help the manager, therefore, the manager has to do it when the engineman is not there?—No, not necessarily, he can do it when he is there if the Mines Act is kept, that is, no men in the mine.

28018. It all depends on the feeling of the particular engineman at the time, as to whether he will help the manager. It is only if he thinks it is all right that he will help to teach this man. If he does not want to he says, "I will not." However, I do not want to take up time over that. I want to emphasise the position Mr. Ellis put to you. If you have these certificates and nobody is allowed to wind without one it must follow that these 5,000 winding enginemen in this country have the control of the whole coal trade of the country?—Would you say from that that the mine managers at the present time have control of the whole coal trade, I mean those who must have certificates. You say they have control, but supposing they had an Association——

28019. They have not?—I expect they will soon have one.

28020. Yes, but they have not one?—I can assure you they are going to have one—will they have full control over the coal trade?

28021-2. They are in a totally different position. Take my manager, for instance, if I say I want you to take so and so as a pupil he has to do it, and if he does not I get rid of the manager?—Do you say in Canada, South Australia and South Africa that these engine keepers have full control over the trade where they work? What is the difference at home?

28023. If every man must belong to your Association who has a certificate, and no man is allowed to wind unless he has a certificate, and, therefore, belongs to your Association, it follows that you have the control of the whole of the access to all the mines in this country. You cannot get away from it, surely?—I do not think anything of the kind follows. You must say the same thing is the case at the present time. If we wished at the present time to make the whole of the coal mines idle——

28024. (*Mr. Ratcliffe Ellis.*) These men at the face are not in your Association?—We are not afraid of these men. You might as well say that the same argument holds good at the present time, that we hold the whole thing in our power. I think that is not the case, and I do not think it would be the case.

(*Mr. F. L. Davis.*) That is your opinion. My opinion is it would be. It would be if you wished it to be.

28025. (*Chairman.*) What happens in South Africa. Who has control over the men who are allowed to be apprenticed?—It works very well. If the manager asks anyone he wishes to learn he learns.

28026. The manager has the power to say that a certain man has to be taught and he is taught?—Whether he has

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the full power or not I do not know, if it went to a question of power, but it works very well in that way. When the manager asks certain men to be taught they just learn for the manager.

28027. That is to say, the management and not the Association, whatever it is called in South Africa, has control over the apprentice ?—They have not control.

28028. I mean in this way, the management can insist practically upon a certain man being taught this engine-winding ?—Not that I am aware of. The Association is, practically, the same as the Association at home.

28029. In point of fact they work very amicably with the manager, and, hitherto, there has been no difficulty in a manager getting anybody taught ?—That is what I wanted to say.

28030. (*Mr. F. L. Davis.*) You have told us you object to having another engine-winder winding in the house a second engine which the winding engineman has to attend to ?—Yes.

28031. That applies only to the winding engine ?—Only to the winding engine.

28032. There is no objection to having a fan engine, or a small electric pump engine, or an electric-light engine in the same building as long as there is not a winding engine too ?—No, it only applies to winding engines.

28033. (*Mr. Enoch Edwards.*) There is a paragraph in your statement: "A mine manager can employ any man from the street as a colliery engineman. In many cases, persons absolutely incompetent." How long is it since that was a practice in Scotland ?—There is nothing to hinder it being done to-day.

28034. How long is it since it was practised in Scotland ? Your Union exists to prevent it happening. How long is it since it happened ?—Supposing that the Union exists, I do not know that it is able to prevent it. There are some collieries where they have only one pit and two men can supply the engine there, and apart from any trouble with the Union they can employ men where they like.

28035. There would be men who are not members of your Union ?—Yes.

28036. Your Union is not complete in Scotland ?—There would be at least five per cent. not in the Association. It is more complete now than it used to be. I am speaking of the past. That can be done yet.

28037. The case you gave of some years ago would be a case that happened before you had a Union ?—Yes.

28038. The cases you brought here would be cases before your Society existed ?—What cases do you refer to ?

28039. You told us that a man was victimised ?—No, we had a Union at that time.

28040. Was the Union unable to interfere ?—They could only interfere by supporting him financially, but they looked into the matter. I was not on the Council at the time, but I know they looked into it, and they came to the decision that he was victimised.

28041. That was before your Union was very strong ?—It was not so strong.

28042. I understood you said the man was not discharged for incompetency but for disobedience. He reported something; he disobeyed the officials or offended them ?—He offended them by reporting defective machinery.

28043. I must confess, with my knowledge of colliery owners, that that is not in harmony with my view of a colliery, that if an engineman reported a defect he would be discharged ?—I do not say that is the general thing. I say that has been done and it could be done yet.

28044. Is it not the business of the engine-winder if there is any defect, to report it ?—Yes.

28045. Would he not be neglecting his business if he did not report it ?—Yes, in Scotland, at any rate, the engine-keepers do not get proper examining.

28046. They get the same examinations everywhere ?—Yes.

28047. This is rather a serious statement you make. It is the business of the engine-winder, if there is anything wrong with the machinery, to report it in England and in Scotland. You say, for reporting it they discharge them in Scotland ?—No, I did not make a general statement of that kind.

28048. We will take what you did say. You gave a case of a man who was discharged from his colliery because he reported defective machinery ?—Yes.

28049. So that in Scotland it is possible ?—Yes, I expect it would be possible in England, too. That case I gave really happened. I was sent this letter regarding this case and there is no doubt about it being the case. The mines inspector told him that possibly a lawyer or a solicitor would take it up.

28050. Your Society did not take it up ?—To the extent that they supported financially the victimised member. That is all that they could do.

28051. You did not report that to the Home Office ?—I do not know what was done.

28052. Whatever law we have it will be the business of the people engaged in it to see that it is carried out ?—Yes.

28053. This, rather, would be a violation ?—Yes.

28054. You could not say whether it was brought to the notice of the Home Office ?—You mean if that was brought to the notice of the Inspector of Mines ?

28055. This case is not within your knowledge ?—No.

28056. Do you think it would happen while you are secretary of the Association and that it would rest where it does ?—No.

28057. In regard to members entertaining your Society, you give certificates of good health ?—Yes.

28058. Is that rather to guard the Society for the purpose of other funds like a friendly society ?—It is the provident side.

28059. It is not a question of fitness as to his position, whether his eyesight would be good, for instance. There is no test of eyesight ?—I know two or three cases where men have not been allowed to enter the winding class because of defective eyesight.

28060. Now he could not be an engine-winder unless sound in health ?—That is so. That is the case, and that is certainly done with a view to the funds. A man must be a competent person to be an engine-winder before admitted to be one in every way.

28061. I suppose all the men who are competent have had to learn and make themselves competent. There would have to be a period of training for all the members of your Society to gain that competency ?—Certainly, they are generally in touch with the machinery and so on, and a great many of them have been winding engines apart from the Society altogether.

28062. I want to see if I follow what has largely taken up the time here this morning. The term manager has been used very often. Are there not engineers about all these collieries ?—Yes, mostly.

28063. Is the chief man responsible—not the colliery manager, but the engineer of the colliery—I mean responsible for all the machinery ?—Yes.

28064. He would know how to work the engine ?—Most of them know how to work an engine.

28065. There is nothing to prevent the engineer who understands the machinery training the enginemen ?—In most cases I believe engineers are winding engine-keepers.

28066. I will assume a man who wns a certificate as a manager understands his business, and that an engineer of a colliery would know something about winding engines ?—Yes.

28067. You assume he would ?—Yes, and they do.

28068. He would be quite a competent person to teach anybody to wind ?—Yes.

28069. He could teach him and he would have that degree of competency that he could take his certificate ?—Yes.

28070. That rather shifts the ground taken up here ?—Certainly it does, and that is the case.

28071. He could train them ?—Yes.

28072. Supposing you said we are not going to teach this man, there could be nothing to prevent the engineer of the colliery teaching as many men as he liked ?—No.

28073. Nobody could prevent them being so taught and receiving their certificate ?—I do not think that the granting of certificates would give any power to the engine-keepers more than they have just because of these things you mention.

28074. Now they do not severely exercise their power. They work 12 hours for 5s. 8d. They do not exercise very great power and claim a great share of the world's wealth ?—I do not think so.

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Mr. R. Shirkie.

17 July, 1907.

28075. I think it rather surprised Mr. Ellis, that 5s. 8d. ?—The first winding engine I went to, the manager taught me the winding of the engine.

28076. What did you mean by saying there are more men handled in the night ?—Instead of there being two 12-hour shifts, by arrangement between the engineman they make one 10 and the other 14 ?—Yes.

28077. That is the enginemen's own arrangement ?—Yes.

28078. They could arrange otherwise if they liked ?—Yes.

28079. They could so arrange that it would not be necessary for one man to handle all the men ?—It would not make any difference as far as the handling was concerned. There are more men handled in the night, because during the day we are winding coal, and there are restrictions for men going up and down the shaft.

28080. I have some experience, but not of Scottish mines; but mines in England. Take a pit where you employ underground 1,000 men. Those are let down by the engineman and drawn up at half-past two ?—Yes.

28081. In the next shift there are very few people. There may be a few labourers going up and down, but a very small number ?—They are one hour or one and a-half hours letting down the men, but I mean the men running up and down during the night.

28082. You do not mean the quantity ?—No. I mean there is more handling of men.

28083. You put it more men handled, but you mean running the cage oftener ?—Yes. It may be the same men handled five or six times.

28084. You said 90 per cent. of these men were in your Union ?—Yes.

28085. Further, that there is a large number of men working at the coal face. There may be no objection to these men at the coal face having certificates ?—They can go in for the certificate.

28086. You would have a competitive examination ?

28087. (*Mr. Ratcliffe Ellis.*) They would get a service certificate ?—Service certificates are generally confined to men working at the trade at the time. I was in South Africa when they came out.

28088. (*Mr. Enoch Edwards.*) We need not go as far as South Africa. Certificates for colliery managers in this country when first made compulsory were given to the first managers for the service, and they are all given for service ?—That is so.

28089. You do not suggest that supposing this law was passed they should be given to the first batch other than for service ? Do you see how they could get over the difficulty ?—I do not see how they could get over the difficulty, to start with, except it was given for service.

28090. It would depend upon what is to be the chief grounds of examination, and what are to be the facts considered. There are many engine-winders sufficiently intelligent to understand how you wind an engine, who would not pass except the crudest form of examination, who are good engine-winders—I mean among the older men who wind engines ?—I believe so; but I think it is conducive to the better performance of duties if a man has a thorough grasp of all that is connected with his duties. There is great incentive to that at the present time. When they go to the winding they do not trouble in many cases. I knew in South Africa an engineman who had been 20 years winding, and he failed. He knew how the steam got into the cylinder, but he could not tell them how it got out.

28091. I believe we have many men with first-class certificates managing collieries who could not get through now by a long way ?—Yes.

28092. I know cases where they would not, and I believe it is so with regard to the engineman. You said wages were 5s. 8½d. for 12 hours ?—Yes.

28093. Is that general over Scotland ?—There are a few exceptions where they work a 10-hours' shift, but they are very few.

28094. The wages are 68½ per cent. higher ?—Yes.

28095. What was the wage before the advance in Scotland ?—5s. 2d.

28096. They do not fluctuate ?—Yes. When the miners are under 6s. a day the engine-keepers only rise or fall by one-third; when above 6s. a day, they only rise or fall by one-half.

28097. The miners would take their day wage down to 4s. ?—It was possible.

28098. Yours was 5s. 2d., and not less ?—At that time ?

28099. Yes ?—No, about 3s. 2d.

28100. That is what I am putting to you. When the collier's wages in Scotland was 4s., what was the wage of the enginemen ?—About 3s. 2d.

28101. For 12 hours ?—Yes. There was nothing else but 12 hours at that time.

28102–11. It would look interesting on the Notes, 3s. 2d. a day for 12 hours' work in 1888 in Scotland ?—I think we are safe in saying that.

28112. (*Chairman.*) In cases of emergency in South Africa what do they do ? Has there been any difficulty to get the engine worked by a certificated man ?—Not that I am aware of.

28113. As far as you know there has not been any occasion to call in an uncertificated man to work the engine ?—As far as I am aware there has been no difficulty.

28114. With regard to health, you say in your own interests, being a provident society, that you insist on certificates of health when a man enters. A man may go a great number of years as an engine-winder and may develop some illness that a doctor may be able to diagnose which would probably end his life suddenly. Do you think that the men would object to being periodically examined with a view to finding out whether their lives were safe ?—I think they ought to be medically examined.

28115. Any man's life the doctor said was precarious and who was liable from the nature of his disease to die suddenly, ought not to be allowed to go on as an engine-winder ?—I think he ought not to.

28116. (*Mr. Smillie.*) Is that the opinion of your members ?—Yes. I remember one case just about six months ago; an engine-keeper in Lanarkshire was letting down the firemen in the morning; there were two cages of firemen, and he let down the cage, and the next men who went on to the cage had come up, and they signalled for him to lower, and there was no answer. They went down into the engine-house and he was lying dead at the levers. That was heart disease; but if that had taken place when these men were going down it would have been the death of the other men. It was just when he landed the men he dropped dead. In that case I think it would be necessary.

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FORTY-FIRST DAY.

Wednesday, 6th November, 1907.

PRESENT:

Lord MONKSWELL (*Chairman*).

H. H. S. CUNYNGHAME, Esq., C.B.
WM. ABRAHAM, Esq., M.P. (Rhondda).
THOMAS RATCLIFFE ELLIS, Esq.
ROBERT SMILLIE, Esq.
S. W. HARRIS, Esq. (*Secretary*).

Mr. SAMUEL WRIGHT ROWARTH, called and examined.

Mr. S. W. Rowarth.
6 Nov., 1907.

28117. (*Chairman.*) You are the General Secretary of the Derbyshire and Nottinghamshire Enginemen's and Firemen's Union?—Yes.

28118. Previous to holding that position you were a winding-engineman in both the above counties?—Yes.

28119. I understand your Union is not a Union only of enginemen, but of firemen also?—Yes.

28120. But to-day you speak solely as to the enginemen, I understand; you do not wish to toll us anything about the question as to the firemen, I suppose?—No, but we do take all classes of enginemen and firemen in as members of our Association.

28121. (*Mr. Ratcliffe Ellis.*) And locomotive drivers also?—Yes, locomotive drivers about mines.

28122. (*Chairman.*) You mean firemen attached to boilers—stokers, and so on?—Yes.

28123. You are a member of the Executive of the National Federation of Enginemen and Boilermen's Association of Great Britain?—Yes.

28124. You were in favour of the Steam Engines (Persons in Charge) Bill, and you gave evidence in favour of it in July, 1901, before the Select Committee?—That is so.

28125. Your Association of the Derbyshire and Nottinghamshire Enginemen's and Firemen's Union embraces nearly all the mines in those two Counties?—Yes.

28126. You say that a great many of your winders complain as to the fatigue they experience of being on duty of such a very responsible nature for so many hours?—Yes.

28127. And you trust to see a legal eight-hours' day established for all winding-enginemen?—That is so.

28128. So that your evidence may be divided into two parts: first of all, with regard to the excessive hours which you maintain are worked by these enginemen and winders, and secondly, as to the precautions that have been taken for safety in winding?—Yes.

28129. To some extent, no doubt, the two questions are mixed up together, inasmuch as your contention, I suppose, naturally would be that a man who works more than eight hours a day would not be so likely to give his whole attention to his work as if he only worked shorter hours?—That is so; the men get fatigued. The coal-owners in the two Counties have recognised to a great extent the advisability of shortening the working hours of winding-enginemen; indeed, at a good many collieries an eight-hours' day is already in operation. In other instances the coal-owners have put three men on in the 24 hours, one man going on at six o'clock in the morning and remaining till four in the afternoon, which is 10 hours, and then going home; another man goes on at eight o'clock in the morning, takes charge for a couple of hours or an hour as they may agree, and they work alternately an hour or a couple of hours as they can arrange. Then the man who went on at eight o'clock in the morning stays till six o'clock in the evening, and then the other man, the third man, goes on at six and stays till six the next morning. But we have many complaints; these men just at the last hour may have hundreds of men to lower down into the mine, and they contend that a legal eight-hours' day—three shifts of eight hours each instead of two of 10 hours and one of 12 hours—would be much better; indeed, they find that they are practically exhausted; of course, they are not winding during all the night shift, the 12 hours; but they are exhausted, and they contend for the advisability of our having an eight-hours' day established by law.

28130. I understand that where you have two shifts of 10 hours and one of 14 hours, the men take it in turns to go on the 14-hours' shift or on one of the 10-hour shifts?—Yes—they work it round.

28131. So that no man is compelled to go on the 14 hours' shift for any length of time?—In some cases they are; the men are there from seven o'clock in the morning till five o'clock at night, and the man is then on 14 hours every other week where there are two men.

28132. Every other week how many days does he have of 14 hours?—He has one week at 10 hours and then a week at 14 hours.

28133. Does he have a whole week at 14 hours?—Yes.

28134. Then during what part of that 14 hours would he be employed in winding; how much winding goes on during those particular days that he is employed for 14 hours?—Different conditions exist at different collieries. Just now they are very busy, as you are aware, the coal-trade being sowewhat brisk, and they are winding during a good portion of the night duty.

28135. So that it depends upon the course of trade; sometimes during the long shift of 14 hours they are pretty continuously employed, and sometimes they would have a certain amount of leisure?—Yes.

28136. What amount of leisure do you suppose they would have under ordinary circumstances; what would be the longest time that they would enjoy leisure during this shift of 14 hours?—Would they ever be a couple of hours without doing any duty?—No; and no one is allowed in the engine-room except themselves—they are cleaning or they are packing in those intervals.

28137. They are doing something?—Yes, such as filling the lubricators, &c.

28138. There is no man allowed in the engine-room except that one man, is there?—No one except the one man.

28139-40. He is on duty for 14 hours?—Yes, for 14 hours. The man on the day shift is constantly employed and has scarcely time to get his meals, or indeed to answer the calls of nature without some bother being made, because in many cases we have not even the sanitary requirements in the engine-room, and the man has to leave the engine-room and go away. We have a fan engine-man at Grassmoor who left the engine-room to

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answer the calls of nature, and he either had to be fined £1 or be dismissed. Of course, the man should have left someone in charge of his engine, but he did not do so. I simply mention this case as an illustration.

28141. How can a man manage if he has to go away for a few minutes?—He has to call someone else into the engine-room—not a competent person necessarily.

28142. There is someone else whom he can call?—Well, he will just call in a stoker to see that nobody interferes with the engine while he goes away.

28143. (*Mr. Ratcliffe Ellis.*) There is no winding going on in his absence?—No.

28144. It is simply that he may have somebody there to watch and see that no one interferes?—Yes, that is all.

28145. (*Chairman.*) Have you had many accidents which you can trace to a man being tired out and not doing his duty properly on that account?—Very few indeed. The way we do in Derbyshire and Nottinghamshire is to go through a course of training, of course, the best man makes mistakes at times, and we have had occasions when good men have made mistakes, but very few accidents in this respect have taken place either in Derbyshire or Nottinghamshire, the men being well-trained men.

28146. That I understand, but I was thinking of accidents which might occur in the course of winding even if you had the best-trained men, owing to those very well-trained men working too long hours and consequently getting so tired that they were unable to perform their duty efficiently?—They have been able to do them—they have managed to pull through somehow.

28147. They have managed to pull through somehow up to the present?—Yes.

28148. You think it is a very great strain upon them?—Very great indeed.

28149. Do you find from the mortality statistics that if a man has been an engine-winder for so many years his life will be a worse life than that of an ordinary collier?—Well, no. I am speaking as on old engine-winder of 32 years' standing; of course, a winding-engineman, when he is in care of life and property, has to be a very careful and good-living man and has to take care of himself, and that is the reason, I take it for granted, why the statistics prove so well in our favour.

28150. Then you cannot point to any accidents which have directly arisen from enginemen having worked for too long hours?—No, not in our district.

28151. That is during the whole 32 years of your experience?—Yes, there was an accident long back—I cannot remember the date, but it is several years back—10 or 12 years back.

28152. As regards the general health of the engine-winder you have no reason to think that it is any worse than that of others who are employed in mines?—The vitiated atmosphere of oil, tallow, &c., is something not to be commended.

28153. I have heard that the rule in Germany is that whenever you are winding men there should always be two men in the engine-room, but when you are winding coals only, it is sufficient to have one man. Have you considered that question yourself?—You mean the method in vogue in Germany?

28154. Yes?—No, I do not believe in it myself. I would rather have one engineman there because in some instances they might take off their attention in talking to each other, or interfering in some shape or form with each other, and accidents might be caused.

28155. On the whole you think it is the best plan to have one man who is solely responsible?—Yes—for eight hours.

28156. Working for eight hours only?—Yes.

28157. Leaving the eight hours' point for the moment, what have you to say on the question of giving the men certificates?—We believe in that, of course; and in giving evidence in 1901 before the Select Committee we dealt with this matter fully. Of course, we have good men who do not hold certificates, indeed, there were no certificates at the time that I was winding. We believe that it would be the means of bettering the conditions of the men if they held certificates, and we believe it would minimise the sacrifice of human life. It has been demonstrated, I think, as you will be aware, by previous witnesses, that lives have been sacrificed by having incompetent men in charge of steam-engines and boilers.

28158. You, of course, are aware that the Committee decided against your claim that the winders should hold certificates?—Yes.

28159. I suppose you have read the Report of the Committee?—Yes.

28160. If you have any observations to make upon that Report we shall be very glad to hear your opinion?—We are pressing forward again the Certificate Bill with this object in view.

28161. That is very much the same Bill, I suppose, as the Bill which was before the Committee of 1901. Has it undergone any alteration?—There is an alteration there; it is to embrace the colliery element only.

28162. To confine the necessity for the holding of certificates to colliery engine-winders?—Yes, and stokers.

28163. Enginemen employed in collieries?—In and about collieries. We have had the Bill before the House of Commons for many years, and they say that we have loaded the vessel too heavily—that we had other industries included—the factory element, the marine element, and others. Then we lopped first one off and then the other, and now I suppose I may take it that we have lopped five off, and we take it on these lines now—the colliery element—"in and about mines."

28164. On the other hand, one of the arguments used by the Committee was that if you had certificates at all, such certificates ought to include "All boilers and engines whether worked by steam, oil, gas or electricity, no evidence having been brought forward by those in favour of the Bill to show why any particular class or classes of engines or boilers should be excluded. Your Committee also considered that if that was the case, certificates might with equal reason be required for persons in charge of cranes, hoists, steam-hammers, and other similar machinery"?—Yes. I believe there will be an application made from another source with respect to factories, workshops, and so on.

28165. But you consider that your business is to look after the safety of coal mines?—Yes.

28166. And that it is for other people to consider whether certificates might not be required outside coal mines for similar kind of work?—Yes, either by the Board of Trade or some other body.

28167. Have you anything to say about the Special Rules which are now in force, or the Rules under the Act of Parliament to safeguard miners when they are taken up and down in these cages?—Yes; we should like the 24th Rule, in the latter part of the first Clause, to read: "In any mine which is usually entered by means of machinery, a competent male person not less than 22 years of age shall be appointed for the purpose of working the machinery which is employed in lowering and raising persons therein and shall attend for that purpose during the whole time that any person is below ground in the mine"; we simply wish to have a Clause inserted saying "and shall not be on duty more than eight hours in any case."

28168. Yes, that I understand?—Except in case of emergency.

28169. Is there any other alteration which you can suggest either in the Coal Mines Regulation Act or in the Special Rules which are in force in your district, or in any other mining district?—Our National Federation have dealt with these clauses; there is one with respect to detaching hooks.

28170. I see that Mr. Hopkins, who is going to give evidence on behalf of the South Wales Enginemen's Association, will suggest that "At all shafts where men are raised or lowered safety detaching hooks or an automatic apparatus for the prevention of overwinding should be used"?—Yes.

28171. I understand that under the present law there is an alternative allowed, is there not; you may either have those detaching hooks, or you may not wind beyond a certain pace; that is General Rule 26?—Yes.

28172. You say there ought to be no such alternative, but that in all cases there ought to be detaching hooks used?—Yes.

28173. I may take it that in most mines in Derbyshire and Nottinghamshire there are detaching hooks, are there not?—Yes, in most of them.

28174. Have you any complaints to make as to their working?—No, they work very well indeed.

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28175. Then you consider that if the detaching hooks which are now used in most of the mines in Derbyshire and Nottinghamshire were universally used that would be quite sufficient as regards that point at all events ?—Yes, we are very much in favour of it. There are collieries in different counties where there are no detaching hooks used.

28176. Then Mr. Hopkins will also suggest that "An adequate steam and foot brake be attached to every winding engine capable of holding—when the cage is in any part of the shaft—any weight raised by the engine where men are raised up or lowered down a shaft." Have you anything to say as to the efficiency of the brakes which are in use in your district ?—Yes, in several instances they get coal from two or three seams in one shaft, and the winders there complain ; as you may be aware, when they run heavy trams of coal in a tub or chair hanging on to the shaft, unless you have a heavy weight to hold it the thing will go round suddenly.

28177. Do you mean to say that in many of the mines which you are acquainted with there is no adequate brake ?—The men complain that the brakes are inadequate ; they simply hold the steam on so that they can feel when they are running on—they simply hold a little steam on, and brake in that way.

28178. I suppose the question which you raise is as to what is an adequate brake, because Rule 30 says "There shall be attached to every machine worked by steam, water, or mechanical power, and used for lowering or raising persons, an adequate brake or brakes" ?—Yes—steam and foot brake.

28179. Do you say there should be an adequate steam or foot brake ?—Both a steam and a foot brake.

28180. You wish to have the Rule strengthened by saying that there must be an adequate steam and foot brake ?—Yes ; you can put the steam brake on without putting the foot brake on, and you can put the foot brake on without putting on the steam brake.

28181. You say there ought to be both, so that either can be used as occasion may require ?—Just so—in case of emergency.

28182. Then another suggestion which I understand will be made by Mr. Hopkins is that a speaking tube should be erected at all collieries for the purpose of communication between banksmen and enginemen. There are many cases where you have either a speaking-tube or a telephone, are there not ?—No. There are many without, and you must know that about a colliery there is such a noise with the machinery and the screens, and the belts, and so forth, that you cannot always hear what the banksmen do say.

28183. Then you think it ought to be compulsory that a speaking tube should be erected for the purpose of communication between the banksmen and enginemen at all collieries ?—Yes, or some other method of signalling.

28184. (*Mr. Ratcliffe Ellis.*) Rule 25 provides for signalling from the bottom of the shaft, but, as I understand, you want some provision made for communication from the top of the shaft to the engine-house ?—Yes, that is it.

28185. (*Chairman.*) Is there any further statement you would like to make on this point ?—There are many collieries where the winding-enginemen, especially on night duty, are compelled to look after other engines and other machinery, and to leave their engine-rooms while persons are below ground in the mine. This is what our men complain about : if they are in another engine-room where the engine is going for the fan, or the pump, and so on, they cannot hear the signals which are given, and in case of emergency, an explosion or an inrush of water in the mine, the engineman would be away and would not be aware of it, because at a good many collieries there are no banksmen in charge of the pit top ; they generally get one of the stokers to do what little banking is required and do not have a banksman there constantly : therefore the winding-engineman is not always aware when any signals have been given whilst he is away performing these other duties, and we consider it very important that the winders should, in accordance with the 24th Rule, remain there and attend there during the whole time that any persons are below in the mine.

28186. Then your point is not so much that the Rule ought to be altered, as that it is not properly observed ?—Yes.

28187. You think that if it was properly observed it is stringent enough ?—Yes.

28188. The point of its not being observed is a very serious thing. Can you not complain to the Mines Inspectors ?—We have done so occasionally, but one does not like to make unpleasantness.

28189. What do the Mines Inspectors say ?—In two or three instances their attention must have been called to it, because they have put a man there on one occasion.

28190. They have put a man where ?—On the bank.

28191. But then that is not a compliance with this rule, because the rule says that this person, who must be a competent person of 22 years of age, shall attend during the whole time that any person is below in the mine, so that whether there is a banksman or not he would be bound to attend ?—Yes.

28192. Then that is a non-compliance with the rule ?—That is so.

28193. You do not get over the rules by employing a banksman. It may be that the danger is got over, but the rule is infringed all the same ?—But what I should like to point out is that the men are compelled to leave their engine-room to attend to other duties, and in the absence of a banksman he is not aware when any signals are given from the pit bottom.

28194. That is so. Then I understand there are two ways of getting over that difficulty : one is always to have a banksman on top who would be about, and who would communicate with the man down below, and the other one is that the man down below should be always in his proper place ?—Yes.

28195. But then, according to the rule, he ought to be in his proper place ?—Yes, but he is not.

28196. (*Mr. Smillie.*) I think the interpretation of this rule is wide : I think this rule is taken to allow of the engine-winder even going into another engine-house, and the Mines Inspectors in some cases say that that is in accordance with the rule. I think what you wish to say is that this rule should be made sufficiently strong to ensure that an engine-winder shall not be required to leave his engine-room ?—That is so.

28197. (*Chairman.*) But then, supposing he has to leave his engine-room for just five minutes, and he calls in another man while he is away, I suppose the other man is competent to attend to the signals ?—Yes, I should say so.

28198. (*Mr. Ratcliffe Ellis.*) There would be no winding during his absence ?—No.

28199. (*Chairman.*) You say that the rule ought to be strengthened by making it perfectly clear that the man ought not to be allowed to leave his engine-room at all ?—That is so.

28200. And that in consequence, of course, he ought to have sanitary conveniences, and so on, so that he should not be obliged to be away at all ?—Yes.

28201. Supposing there were two engines without any dividing compartment between them, so that a man might attend to both of them, and might hear the signals that affected both those engines, would you consider that he ought not to be allowed to work two engines ?—There should be partition walls between the two winding engines.

28202. Why ?—We have had accidents happen where there has been no partition between the two winding engines : we have had a man killed.

28203. How does the partition prevent an accident ?—In one case they were changing the rope : a round rope was on one drum and a flat rope was on the other drum, standing back to back : there was a temporary platform across, and these men were pulling in this round rope to fasten it to the drum : the other rope behind was a flat rope which went in between the horns, and as the man pulled the rope in on to the platform the horns of the drum behind caught hold and pulled him down between the horns of the drum and the platform, a distance of three or four inches, and killed him. That was at Eastwood Collieries, Barber & Walker's collieries.

28204. In that particular case the two drums, one having the flat rope and the other the round rope, were so near that it was dangerous for persons to operate either apparently ?—Yes : there should have been a wall between. There is now.

28205. There is one now in that particular case ?—Yes.

28206. But do you mean to say you think it should not be allowed on any occasion that there should be two winding engines without a partition between them ?—If there were arrangements made so that the winder should

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be able to manipulate the two it would not arise. Here I do not say but that he could manipulate the two, providing the duties were not so exacting.

28207. So that you would not be altogether against the one man manipulating two engines working in the same room, provided the circumstances were such that he would be sure of being able to hear and to attend to the signals of both engines?—It is only with respect to enabling them to hear the signals: the complaint is that the men cannot hear the signals while they are performing other duties outside the engine-room.

28208. So that you mean that if two signals were going simultaneously from both engines, a man might get confused?—Yes.

28209. Therefore on the whole you consider it desirable that a man should not work more than one engine. Is that your contention or not? You do not go so far as that, I understand?—Well, I say only one.

28210. You think it would be better that he should attend only one?—Only one.

28211. And you would have that made a General Rule?—Yes. You see in some instances the winding-enginemen are in charge of the boilers.

28212. They are in charge of the boilers as well?—Yes.

28213. And you say that ought not to be so?—I say that ought not to be so.

28214. But that you ought to have a fireman in charge of the boilers as well as the winding-man, and that the winding-man ought solely to look after the engine?—Certainly—and the same with the fireman.

28215. I understand that is not so now: you have the men constantly doing firemen's duties as well as winders' duties?—Only during the night shift. Where there is no coal-winding during the night shift some of the winding-enginemen are in charge of the boilers invariably, unless there is some particular business going on that necessitates his being kept in the engine-room.

28216. But you have never known any accident arise from that circumstance of the man on the night shift being always in charge of the boilers as well as of the winding?—No.

28217. Still, do you say it is a practice which ought to be discontinued?—Yes—very much so. The men are complaining very bitterly against it. Men are waiting at the pit bottom, ringing, knocking, and shouting, and they cannot get up.

28218. There is that inconvenience: there is no accident, but very often the signals are not heard, and the men cannot get up?—Yes. There has been an accident when a man got his leg broken in one case.

28219. (*Mr. Ratcliffe Ellis.*) That is not a case where they are winding coal during the night, but it is where a repairing shift is going on?—The roadmen working night shift.

28220. It is not the case of winding coal at all?—No.

28221. (*Chairman.*) You say that owing to this system which is universally prevalent, of a man on a night shift being obliged to do stoking work as well as winding work, it very often happens that men who are down the shaft on repairing shifts are inconvenienced, and cannot get up for some time?—Yes.

28222. (*Mr. Ratcliffe Ellis.*) The complaint which you make is that the last thing a man has to do in his winding shift is to wind men up, and that you think ought to be altered?—Yes, to let the men on the day shift down and to draw the night men up.

28223. That could be altered at present, could it not? Arrangements could be made by which the man could go on a little earlier to wind the men down, so that that should be his first job instead of his last job?—Yes, but you see if there were three shifts the man would only be on for his eight hours.

28224. But will you forget the eight-hours' point for the moment; even with the present arrangement it could be so managed that the first thing the man had to do would be to wind the men down?—Yes.

28225. That could be arranged at present; and you think that would be an improvement?—Yes. The great improvement would be to put the eight hours into operation; that is our contention.

28226. But forgetting the eight hours for the moment, and speaking only about the safety of the men, that could be done now; instead of it being the last thing the winding-engineman had to do, it might be the first thing that he had to do?—Yes, but still the winding-enginemen cannot fix their own hours; it is for the manager to fix them.

28227. Still, if it was thought necessary by these men to recommend that that should be done, in your own experience as a winder when you find you have nothing to do but to look after your engine, and so on, do you say it is a very exhausting thing to have to wind the men down after you have been on duty all night?—Yes.

28228. And you think that although happily there have been very few accidents, yet it would be safer if such an arrangement as that were made?—I do think so.

28229. You said that the engineman in your counties were very well-trained men. Do you not think you might extend that description to all the enginemen everywhere?—Well, I cannot say that.

28230. But you know that not only in your county, but generally, accidents are very few indeed?—Yes, they are.

28231. That is a very strong certificate for the competency of the engineman?—Yes.

28232. Do you not think that is a better certificate than you would get from the Home Office?—No, I do not think so.

28233. What would be the advantages in point of safety which it occurs to you would result from having Home Office certificates?—We would be better prepared; we should be certain that we had competent men. As you know, they are in vogue in the Colonies.

28234. Do you think the men would be better than they are now?—I think they would. The men would have a better chance in their lives, too, if they had certificates.

28235. Have you seen the Report which was issued by a Safety Catch Commission in the Transvaal?—No.

28236. They have certificates there; you are aware of that?—Yes.

28237. This is a paragraph 138 on p. 25 of the Report: "In 2½ years out of a total number of 67 overwinds, 56 were due to the engine-drivers' neglect, and of this number 13 were caused through the engine-driver having his reversing lever in the wrong direction. The majority of these drivers were certificated, and there no question arose as to the competency." ?—Yes. I do not say that the certificate would make the men any better in that respect, because the best of men make mistakes, and even although a man may be certificated, he may make a mistake.

28238. Then in point of safety do you think the certificate would be any advantage? I am not speaking about the status of the engine-winder, but I am asking you to confine your attention purely to the question of safety; do you think it would be an advantage?—I do.

28239. You know the objection that I made before that Committee in 1901 to this question of certificates?—Yes.

28240. That it would tend to establish a particular class who might control the access to the mine?—I remember it.

28241. Would you be prepared, in case it should be considered desirable, to recommend the granting of certificates to do two things, first of all to have it provided that the enginemen should be required to teach the persons whom the manager of the mine sent to be taught?—The man whom the manager sent to learn to wind might not be a man who could take to a winding engine. All men are not adapted alike.

28242. Then who is to decide that, from your point of view?—I do not say that the recommendations of the managers would always be the right ones. I think the enginemen would be the proper parties to judge as to the fitness.

28243. I do not wish to misrepresent you; I only want to know exactly what your view is. Then your view is that the engineman should decide whom he should teach?—I do not say that.

28244. How far do you go?—You know that we have, as most Associations have, rules to be governed by. We say that these men should have a training. There have been times when incompetent men have been taken into winding-engines and the result is that there have been accidents. You know that obtains in Lancashire, do you not?

28245. I think you must excuse me from answering questions. I want you to tell me this; how far would you go—would you say that the engine-winder is to decide whether he should teach a man who is sent to him to be taught or not? Your rules provide that he must go as far as that—that he must only teach people who are

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approved by the Association. I want your opinion with regard to this; in your view should the engine-winder decide who he should teach?—Well, yes.

28246. The second question that I want to ask you upon this is, would you be in favour of a provision in any Act of Parliament requiring that a certificated man only should be allowed to wind, that the Home Secretary might permit other people to wind under circumstances when he thought it might be right to do so?—Yes, I could not say that that would do any harm.

28247. With regard to safety catches there is no General Rule at present. Do you think there ought to be a General Rule for compulsorily providing safety catches?—Yes.

28248. Are you not aware that there are two opinions as to the desirability of safety catches; some people think that they might come into action when they were not wanted, and cause mischief, and some people think—and very clever men, too—that they had better depend on the ropes than on safety catches?—Yes, there are two opinions respecting them. The sudden operation of the safety catches in some instances, unless the ends of the cages are of such a nature that they prevent the men from falling off, might, or would, jerk them off the cage.

28249. Then they might come into operation when they are not wanted to come into operation?—Yes, that might be so.

28250. Do you think, again, that they are suitable to anything but wooden conductors?—Yes, they can be adapted to steel ropes.

28251. Do you think they can be so adapted safely?—I think so. I have seen sketches of them where it is shown that they would grip.

28252. Are you judging merely from sketches—plans?—Yes.

28253. Not from any actual experiment?—No.

28254. Bearing in mind that there are these two opinions, do you think still that it is desirable to make the use of safety catches compulsory?—I do not say so.

28255. You would not go so far as that?—No.

28256. With reference to detaching hooks, that is provided for, or there must be a limitation of the speed at present?—Yes.

28257. You want something to prevent over-winding?—Yes.

28258. But whether it is a detaching hook or some other contrivance, if it is effective you do not mind which it is?—That is all we care about.

28259. Have you any experience of Bertram's patent?—No.

28260. They are in use at many Lancashire collieries, and the effect is that if the speed is not reduced when the cage arrives at a certain point in the pit, which is fixed, the steam is shut off automatically, and the speed is reduced?—Yes.

28261. What do you think of that?—I have not had any experience with respect to those; I have only had experience of the detaching hooks—Calow's patent, and King's patent.

28262. Of course, manifestly it would be better to stop the engine, would it not; there would be no over-winding if the engine was stopped?—It would be impossible to over-wind if the engine was stopped.

28263. Then if you have that vizor, and if the speed is not reduced at a certain point and there is danger in that event happening, if the steam is automatically shut off there can be no over-winding?—Yes. It is a very good apparatus.

28264. What you think is that there should be the best provision made against over-winding?—Yes.

28265. But whether by detaching hooks or by vizor, you do not mind: you would not object to any system?—Either by detaching hooks or by the system you are alluding to.

28266. Now in the case of the person attending the engine-house during the day, of course when the coal winding shift is going on none of these difficulties that you suggest arise?—No.

28267. The man is in the engine-house all the time winding, and the banksman is there, and very generally there is a signal from the banksman to the engine-house, is there not?—Yes.

28268. You want that made general?—Yes.

28269. In the night, when the repairing shift is on and not the coal-winding shift, is it safety or convenience that you want to provide for?—It is safety.

28270. If the man is not in the engine-house at the time, there is no winding. In some cases it may be that he is not there and therefore cannot hear the signal from the banksman, and the people are kept at the bottom of the pit, but they are not in danger?—But people are going up and down continually at many collieries during the night.

28271. Not when the engine-winder is not at the engine?—No. He is somewhere else doing some other work.

28272. Then who is winding?—Nobody.

28273. How can they then go up and down the pit?—They have to wait until he comes back.

28274. That is what I mean, that it may be an inconvenience to them, but it does not affect the safety?—Do you mean the safety of the men down the mine?

28275. Yes, the absence of the engine-winder from the house at the time when there is a banksman signalling and the men are wanting to come up. I can understand the point of inconvenience, but does it affect their safety?—We have had people lamed and with their legs broken, waiting at the pit bottom for an hour or an hour and a half.

28276. In cases where there has been an accident to a man there has been delay in having the man pulled up?—Yes, and in cases where the horse-keeper has wanted to come up, or other people—the deputies.

28277. How many cases can you mention in which there has been an accident and in which a man has had to wait for an hour before he could be drawn up?—I could not quote the number, but there are a good many in the collieries in Derbyshire and Nottinghamshire where there is only one winder on duty for 14 hours on the night shift.

28278. But I am on this point of the winder not being on duty at the engine-house at the time the men want to come up the pit, and I want to know how that affects the safety of the men. You have given me the case of a man having met with an accident and there having been delay in bringing him up: that delay might be injurious, probably?—Yes.

28279. But assuming that men have not met with accidents down the pit, how does this delay in bringing them up affect their safety?—I cannot say that there is anything unsafe there.

28280. (*Chairman.*) Except in the case of an accident?—Except in the case of an accident.

28281. (*Mr. Ratcliffe Ellis.*) You have made the suggestion that there should be both a foot brake and a hand brake?—Both a foot brake and a steam brake.

28282. Have you any other suggestion to make as to the engine itself, for the purpose of increasing the safety of the mine?—No.

28283. Have you ever seen cases where the rope is not wound on a drum, but there is a single rope, one going down and the other coming up?—Yes.

28284. Do you approve of that method?—I should like to understand you fully.

28285. I mean that the rope does not coil itself on a drum, but there is only one rope, which is attached to the descending cage and the other end of the rope is attached to the ascending cage, and it just winds round the wheel.

28286. (*Mr. Smillie.*) Round a friction wheel?—No.

28287. (*Mr. Ratcliffe Ellis.*) You have not seen that?—Do you mean those conical drums?

28288. No, not a drum at all?—No, I have not seen that.

28289. Then you have no other suggestion to make as to the engine?—No.

28290. Do you say anything about the rope?—No.

28291. Have you no suggestion to make by way of improvement as to the examination or the testing?—No, we have nothing to complain of in our district in that respect.

28292. (*Chairman.*) Have you never had an accident from the breaking of a rope, that you remember?—No: they very rarely occur in our district—very rarely indeed.

28293. (*Mr. Smillie.*) You say you are in favour of certificates of competency being granted to all engine-winders?—Yes.

28294. And to firemen, too, I think?—Yes.

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28295. By "firemen" do you mean boilermen and stokers?—Yes.

28296. In answer to Mr. Ellis you said you had no objection to putting the power into the hands of the Home Secretary (even in the event of a law being laid down that winders must hold certificates) in an emergency to allow men who did not hold certificates, to wind. You say you have no objection to that?—Yes.

28297. Supposing it were the law that engine-winders must hold certificates of competency, you only claim that in the interest of the safety of the miners?—That is all.

28298. Supposing a strike of engine-winders took place about some question, do you then give up any thought that you might have for the safety of the miners?—No, I do not give it up.

28299. You say you would allow the Home Secretary in an event of that kind to permit a non-certificated winder to wind?—I suppose the Home Secretary would see that they were competent men without their being certificated.

28300. But if it is in the interests of the safety of the miners really that enginemen should have certificates, why should they allow the lives of the men to be in the hands of uncertificated men? Do you not think the enginemen would be in favour of putting it into the power of the Home Secretary to allow an uncertificated man to wind?—No, I do not think they would.

28301. Do you not think the miners would decline to allow a thing of that kind?—I think they would object to it.

28302. Do you think the engine-winders would not be prepared to allow it to be put into the hands of the Home Secretary to have power to do that?—Yes.

28303. Do you think that the engine-winders would be inclined to consent to a provision being put into the Act allowing the Home Secretary to permit uncertificated engine-winders to wind in the case of there being a strike of the certificated engine-winders?—No. As to that, I think my answer to Mr. Ellis did not refer to allowing permanent engagements.

28304. I know what Mr. Ellis meant, but I think you do not?—I do not think it should be allowed except in case of emergency.

28305. Yes, in case of emergency. Supposing 5,000 certificated engine-winders were either locked-out or on strike, you would not be in favour of the Home Secretary having a power of that kind in that case?—I should not.

28306. (*Mr. Ratcliffe Ellis.*) Would you add to your answer the reason why you would not be in favour of it in that case?—My meaning was in case of emergency if there was no certificated man there, that the manager should be empowered to send a competent man.

28307. But I should like you to give your reason for the answer which you gave to Mr. Smillie that you would not, under the conditions which he suggested, be in favour of an exemption?—We would abrogate our rights by so doing as Trade Unionists.

28308. (*Chairman.*) What you mean is that if for the moment it was necessary, owing to the sudden illness, we will say, of an engineman, that someone else should be employed, and that there was an uncertificated man to employ instead of him, then the manager of the mine would be empowered to send someone else to do his work for him who was competent?—Yes, that is my meaning.

28309. (*Mr. Smillie.*) You would have no objection at all in the case of emergency arising at the colliery, where a certificated engine-winder could not be found for the time being, to a clause being put into the Act saying that a competent person who was uncertificated should be allowed to wind?—I should have no objection to that.

28310. But you would draw the line at 4,000 or 5,000 uncertificated persons being allowed to wind?—Yes.

28311. Is that because it would increase the danger?—Yes, it would increase the danger, too.

28312. We may take it that if you are correct in your contention that it would increase the safety of the lives of miners to have certificated winders at all the engine-houses, you think it would increase the danger if at any time non-certificated engine-winders were put in charge?—I do; that is my meaning.

28313. (*Mr. Ratcliffe Ellis.*) If I might interpose a question, I should ask you this: when you say it would abrogate your rights as Trade Unionists, to put it in plain English you mean it would prevent you imposing upon the colliery owner whatever terms you might think fit. That is the plain English of it, is it not?—No.

28314. (*Mr. Smillie.*) You are aware that at the present time managers in charge of collieries must hold certificates of competency?—Yes.

28315. You have never heard it suggested that in the event of a dispute between colliery managers and colliery owners the Home Secretary should have the power to put the mines of the country in charge of uncertificated men?—No, I do not think that would be done.

28316. And you do not think that the managers are anxious to continue the certificates in order to place them in the position of dictating terms to the employers?—No.

28317. But in the interests of the safety of underground workers, you think the engine-winders should have certificates?—That is so.

28318. Mr. Ellis put a question to you suggesting that you might, by arrangement with the managers, obviate the dangers which you say arise from engine-winders at the end of their shifts lowering the men in the morning?—Yes.

28319. You said that if an engine-winder coming on a day's shift came an hour or an hour-and-a-half sooner, then he would be fresh, and he could lower the day shift?—Yes.

28320. You stated that that was quite true and that that could be so?—That could be so.

28321. But in a colliery where there are two shifts supposing an engine-winder started at five o'clock instead of seven o'clock in the morning, and lowered the day shift when he was fresh, would he not have to raise that same shift when he was not fresh?—Exactly.

28322. And it would not obviate that at all where there were two shifts in a mine?—That is so; and there are many collieries where there are two shifts

28323. Even in the instance which Mr. Ellis gave, that a man may be fresh when he is lowering that shift; he would also have to raise that shift at the end of his time, and the same danger would arise in that case?—Yes, exactly.

28324. (*Chairman.*) Could not the shifts be arranged in such a way that the man who lowered at the beginning of the shifts should be allowed to go off just before the men were required to come out of the pit, and then that the next man should raise the men who were in the pit and lower the men on the next shift at the beginning of his work. He might perform the two operations in the beginning of his shift; the first operation would be to take up the men at the beginning of his shift, and the second operation would be to send the men down for the next shift?—I do not know whether that could be arranged.

28325. (*Mr. Smillie.*) I can see perfectly well that the objection of the engine-winders is that a night-shift man is on for 14 hours, and naturally you agree that an engine-winder may not be in the best condition for lowering men under those circumstances?—Yes.

28326. Mr. Ellis says that instead of that, the day-shift winder might come on earlier in the morning and relieve the night-shift winder, and that he would be able to lower that shift of men when he was fresh, but then that shift of men would come up again during his shift?—Yes.

28327. If an engine-winder's eight-hours' day were enforced, then at the end of that man's shift he would be going off at the conclusion of that eight hours, and a man would come on fresh at the beginning of the next shift?—Yes.

28328. The usual thing is to have an eight-and-a-half hours or a nine hours' shift, and the men who are lowered by the engine-winder in the morning come up again before that engine-winder's shift is finished—unless he is on an eight hours' shift?—That is so.

28329. (*Chairman.*) Would it not rather go to this, that it might be a convenient thing that whatever shift there was underground, the same length of shift should also be imposed upon the enginemen, so that if it was an eight-and-a-half hours' shift the enginemen should also have an eight-and-a-half hours' shift, or if it was a 10 hours' shift, as it is in some cases in South Wales, that the enginemen should have a 10 hours' shift. In that way you might make it certain that a man always did the greater part of his work when he was fresh and beginning the shift. Would it not be desirable that a man's shift should begin and end at very much the same time as the colliers' shift begin and end?—Well, different conditions exist at different collieries: some collieries work, as Mr. Smillie has said, about eight-and-a-half hours or nine

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hours, some work 12 hours: and we have collieries where they are now working, the trade being brisk, one full shift and another following on relieving them; and, as Mr. Smillie says, the engine-winder would have to contend with those people just the same unless an eight-hours, shift was being worked.

28330. (*Mr. Smillie.*) Supposing Mr. Ellis's suggestion were adopted, the day-shift winder would lower it might be 200, 250, 300 or even 700 men into the mine?—Yes.

28331. Is there not at the present time in modern collieries a considerable stress on the day-shift winder?—More so than ever.

28332. He scarcely gets a chance to lift his eye from his signals from morning till night?—Yes, he is taxed more than ever.

28333. The stress is greater on him now than it ever has been before?—With modern and up-to-date machinery there is a greater tax on the winder than there ever was.

28334. Supposing that a winder lowered the men in the morning by coming on a bit earlier in his shift, and then had eight hours or eight-and-a-half hours' continuous winding, is he in a fit state, after the strain of winding, to raise those men at the end of the shift?—He is not—and that is our contention for the eight-hours' day.

28335. He would not even be in as fit a state to raise the men that night as the day shift man would be to raise the men in the morning?—He would not; he would be worse.

28336. (*Mr. Wm. Abraham.*) But would it not be impossible to arrange it in that way unless the shifts are 12-hour shifts?—Yes.

28337. There would be some portion of time that the man would not be there at all—unless he is to be there from 12 to 14 hours?—Yes.

28338. (*Chairman.*) My suggestion was that, m order that the man should do the greater part of his winding at the beginning of every shift, it might be advisable, so far as possible, to make the winding shifts coincident with the working shifts, that is to say, that when an engine-winder has come early in the morning and wound the men down, then he should work on until the time arrived for the men to come up again?—Yes.

(*Mr. Smillie.*) That would be about eight hours.

28339. (*Chairman.*) Yes, or it might be eight-and-a-half or nine hours?—Yes, it might be.

28340. If it was considered to be dangerous to employ a man in winding for more than nine or ten hours, or a specified number of hours, then that state of things could not exist—you could not always make sure that a man did the most of his winding at the beginning of his shift as you would like to do?—That is so.

28341. (*Mr. Smillie.*) We know that Mr. Ellis would be with us in regard to regulating the hours of engine-winders if it could be proved to his satisfaction that there is really a danger to human life underground by reason of the engine-winders working too long hours?—Yes.

28342. And I take it that his difficulty is to arrange it so as to provide the safest course?—We have collieries where they bring the winder on at 6 o'clock in the morning, and he winds until 12 noon; then another man goes on at 12 noon, and winds till 2 o'clock: but the one that went on at 6 simply looks round the machinery and oils it up and so on, and then takes charge again from 2 o'clock till 3 o'clock, and then he goes home having been there nine hours and having been winding for seven hours. Colliery owners recognise the responsibility of the duties of these people to that extent. The man who then goes on at 12 remains until 9 o'clock in the evening, finishes the drawing of coal, draws all the men out and remains till 9 o'clock. Another man comes on at 9 and remains till 6 o'clock the next morning. There are three winders at that particular colliery. But then there is the other illustration I gave of two shifts of ten hours and one of 14 hours—the night man who is on 14 hours with all this number of men to get down.

28343. Are there many eight-hours' shifts?—A good many in Nottingham.

28344. The colliery owners have themselves recognised the desirability of it?—They have.

28345. Do you know of certain collieries in Scotland where the same thing is recognised, and where the engine-winder has to wind for an eight-hours' shift and a certain amount of output?—That is so, I believe. We have an application before our coal owners at the present time for the same purpose—an eight-hours' shift.

28346. What is the greatest number of men riding in one cage in Nottinghamshire?—20.

28347. Therefore, in certain collieries in Nottinghamshire, there may be 20 men ascending and 20 descending?—That is so.

28348. So that there might be 40 men in the shaft?—Yes.

28349. You are aware of some collieries where there might be 40 men in the shaft at the same time?—Yes.

28350. Would the lives of those 40 men in a colliery in Nottinghamshire depend upon the nerve, ability and skill of the engine-winder?—That is so.

28351. Their lives depend even on more than that—they depend upon whether he is absolutely healthy and strong?—Yes.

28352. He might, by reason of sudden illness, heart failure, or anything of that kind, accidentally fail, and the probabilities are that under those circumstances the lives of those 40 men would be sacrificed?—Yes.

28353. In answer to his Lordship, you said you were not in favour of two men being in the engine-house?—That is so.

28354. Have you known of any case in which through heart failure or sudden illness an engine-winder has fallen down in his engine-house and an accident has taken place?—I have heard of a case in Lancashire, but we have not experienced one in our counties.

28355. Do you know that the Mines Inspectors have in some of their Reports called attention to such cases? One Inspector has called attention to two cases at least where that has taken place?—Yes, I believe that is so.

28356. Where there is a considerable number of men being raised and lowered at the same time, do you not think it is a very serious risk to put upon the health of one man the lives of 40, 50 or 60 men who may be going up and down a shaft? In a case of that kind, where men are being wound up and down, would it not be well to have another engine-winder for the time being there?—It would in a case of that kind.

28357. For instance, the Commissioners visited a colliery in Germany at which 140 men were in the shaft at the same time, and the lives of those men depended not only upon the engine-winder being skilful and steady, but also upon his health for the time being?—Yes.

28358. There were two engine-winders in that room?—(*Mr. Ratcliffe Ellis.*) Not engine-winders, but learners.

28359. (*Mr. Smillie.*) There were two persons, either of whom could have stopped the engine, I think. I do not think any person on the score of expense would object to a second winder being present for an hour each day?—It would be a very good thing indeed.

28360. Your objection to Rule 24 is that the intention of the rule is not carried out?—It is not.

28361. Do you consider that the intention of Rule 24 was that the engine-winder should at all times be in the engine-house beside his engine while men were underground?—Yes, whilst there were men down the mine, I do.

28362. And the point really is that the intention of that rule was not carried out, if that was the intention of the rule?—If that was the intention, it is not carried out.

28363. Because night-shift winders, as you say, have to look after their boilers?—Yes.

28364. And very often they have to look after a fan engine, or sometimes a pumping engine, and they have many other duties on the surface?—Yes, being in charge of boilers, and so on.

28365. You think that interferes with their being able to look after the safety of the men underground?—It does indeed.

28366. Is it not the case that engine-winders, as an association, and I believe individually, object to more than one engine being in the same engine-house?—Yes.

28367. They are desirous that only one winding engine should be in an engine-house?—That is so.

28368. There are cases where there are more than one winding engine in the winding engine-house, and there is a considerable noise caused?—Yes.

28369. It may be that there is a pumping engine or a hauling engine side by side with the winding engine?—Yes.

28370. And sometimes even the signal bells of the hauling engine are in the engine-house where the winding engineman has to attend to his own engine?—Yes.

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28371. That very often leads to misunderstanding, I think, or at least it may lead to the engine-winder misunderstanding the signals?—It has been so. The winders have started away with the impression that the signal has been given when it has not been given.

28372. Consequently you think it would be in the interests of safety if it were laid down by law that only one engine should be in the winding engine-house, and that an engine-winder should attend to it only for the time being?—Yes.

28373. (*Chairman.*) I should like to ask you with regard to this question of who should decide as to whether persons should be taught engine-winding or not; do you think that it ought to be entirely in the hands of your Union to decide as to who should be taught engine-winding?—Well, yes.

28374. That it should be absolutely in the hands of the Union that they should have power, without giving any reason, to say that they did not consider that any particular person was eligible?—We take it in this way: we do not like to dictate to the management in this respect, but we do take into consideration competent men, and by promotion bring them from other engines; we first teach them to generate steam and then how to use it, and those of our members whom we know, we say are the men to be the future winders, and that it should not be left exactly in the hands of the managers to say who shall or who shall not be the winders.

28375. You say you insist upon certain preliminary training—that a man should not get a certificate until he has gone through certain processes and fully understands them. But supposing a man wants to begin at the beginning and says that he wants to learn a particular process, say the first process that is learnt in the course of his studies, why should you object to any man being taught?—He cannot get the knowledge except by experience.

28376. That is so, but supposing a man wishes to get that knowledge by experience, or supposing a person of the usual and proper age to begin instructions in engine-winding says "I should like to be taught engine-winding," on what grounds would you refuse the application? Would you refuse the application simply because there were enough certificated engine-winders and you did not want any more? Would that be sufficient ground in your opinion?—No.

28377. Perhaps you would insist upon a man being a member of your Union; or promising to become a member of your Union; would that be a condition?—Yes, we should.

28378. Supposing a man did say "I am quite willing to become a member of your Union and to subscribe to your Rules, and I want to learn engine-winding": would you say to him "We have got enough engine-winders and we do not want any more"?—No.

28379. You would not desire to restrict the numbers?—No.

28380. You would simply inquire whether he was a man of reasonably good character and fair ability?—Yes.

28381. And if you found that he was a man of reasonably good character and fair ability you would not refuse him simply on the ground that this particular business of engine-winding was likely to be overdone?—No; if he had those necessary qualifications we would take him.

28382. Have you ever refused to allow a man to be taught if he said he would belong to your Union?—No.

28383. (*Mr. Smillie.*) The position put forward by Mr. Ellis was, would you object to the manager at his own colliery going into his own engine-house and saying "We want you to teach this man." Your position is that you ought not, as an engine-winder, to be forced to teach any person whom the manager sent?—No.

28384. But if it were laid down by law that engine-winders must hold certificates of competency, it is just possible that there might be schools for teaching engine-winders just as there are schools now for managers?—That is so.

28385. You would have no objection to men trained in those schools becoming certificated?—No.

28386. Consequently there might be no limit to the number of certificates granted?—No.

28387. And it would not be fair to say that you would object to trained persons merely in order to prevent a certain number getting certificates?—That is so.

28388. It is only that you feel you ought to be entitled to have some say as to whom you should give instruction to?—That is so.

28389. (*Mr. Wm. Abraham.*) You feel that the training you give now is essential and necessary in order to make those persons qualified winders?—I do.

28390. (*Chairman.*) But supposing the managers, for instance, were to set up a training school for winding-enginemen, and they were to teach boys how to wind and to get them to a certain degree of proficiency in the schools, would you insist that after they had passed a proper examination in those schools they should belong to your Union before they could go in for their certificates?—I do not say that.

28391. (*Mr. Ratcliffe Ellis.*) There is a Bill which you are promoting again, or intend to promote again, during the coming Session, to provide for certificates?—Yes, I believe so.

28392. And that is also to be confined to winding engines at collieries, as the last Bill was?—I believe so.

28393. The Select Committee reported that colliery engines were the engines as to which certificates were least needed. That is so, is it not?—I do not think so.

28394. I see the Report says: "The Committee are of opinion that the provisions of the Mines Regulation Act, 1887, the General Rules incorporated with that Act, and the Special Rules which are fully detailed in the evidence of Mr. Ellis (Questions 2210-2220) are admirably adapted to secure the selection of competent persons for taking charge of engines and boilers and for fixing the responsibility in the case of mines." Your Bill at that time applied to all engines and boilers?—Yes.

28395. The Committee said that the present regulations are admirably adapted, with reference to mines, for the selection of competent persons: and still you are proposing a Bill to legislate for that very industry which the Committee decided was at present sufficiently equipped with General and Special Rules to secure competency?—We do not agree with that.

28396. No, I understand you do not agree with that: but that is a fact?—That is a fact.

Mr. WILLIAM HOPKINS, called and examined.

Mr. W. Hopkins.

28397. (*Chairman.*) You appear here on behalf of the South Wales Enginemen's Association?—Monmouthshire and South Wales.

28398. The South Wales Colliery Enginemen of all grades, Stokers and Surface Craftsmen's Association, which has a membership of about 8,000?—Yes.

28399. How many are employed on similar work that are not in your union?—I could not say exactly as to the number in the coalfield altogether. Mr. Jones, the gentleman who is coming after me, represents a large number of winding enginemen who may be able to do that: the majority as regards winding enginemen are his, but I have a large number.

28400. The majority of winding enginemen belong to your union?—The majority to Mr. Jones', as far as the winding enginemen are concerned.

28401. You mean you and Mr. Jones together?—Yes, but I have a large number in my organisation.

28402. I want to find out what proportion of men are in your union and what proportion are outside it. Can you tell me at all?—Taking the whole of the enginemen and stokers, in the mechanical department, I think we have got at least 80 per cent. I will put it in that way.

28403. Eighty per cent. belong to your union?—I should put it at that.

28404. The great majority, at all events. You have heard what Mr. Rowarth has said; do you wish to make any comments on his evidence?—I should like to touch upon all the questions with the exception of an adequate brake. I agree with what he has said upon that point.

28405. The steam and foot brake?—Yes.

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28406. With regard to safety detaching hooks or automatic apparatus for the prevention of over-winding, you agree pretty well with what Mr. Rowarth said, that is to say, that some sort of apparatus ought to be used, not necessarily a safety detaching hook. Possibly the question might be dealt with by automatic shutting off of steam, or in some other way?—Quite so.

28407. At all events something must be done to prevent over-winding?—Yes.

28408. You have over-winding accidents in South Wales?—We have been very free from over-winding accidents in South Wales.

28409. You say that a speaking tube should be erected at all collieries for the purpose of communication between banksmen and enginemen. Do you agree with what Mr. Rowarth said, that it need not necessarily be a speaking tube, but some other means of communication—the telephone?—Yes.

28410. There must be some means of communication?—That is right.

28411. You go on to say that periodical inspection of all colliery engines and boilers should be made by an Inspector appointed for such specific work by His Majesty's Government. There is a very considerable inspection now going on. There is an inspection when boilers are insured by the Insurance Company?—Yes, but there are a large number that are not in the Insurance Company.

28412. You do not think those are sufficiently inspected?—That is so.

28413. What do you go upon when you say that? Have there been accidents?—From what I have heard from the men, some boilers are allowed to go for a number of months without being cleaned properly. I may say at other collieries they do it monthly, but not at all collieries.

28414. I suppose underground boilers are constantly being looked at?—Just in the same way. I do not know that there is any more inspection of them than upon the ones at the surface, unless they are insured.

28415. You say they are not all insured?—No, not to my knowledge.

28416. I see the Factory Act only requires every steam boiler to be examined thoroughly by a competent person once at least in 14 months. That would hardly be enough?—It depends upon the water. There is water in some collieries where it requires the inspection every month. There is a vast difference in the water used in boilers. I may say that locomotive engines, where the water is very poor, they inspect or clean every week, but where the water is better, it may be every fortnight.

28417. Would you suggest that there should be any General or Special Rule on the subject?—What I would suggest would be that there should be an inspection at least every month by the colliery management, at longer periods by Government Inspectors.

28418. (*Mr. Wm. Abraham.*) Do you have a rule to that effect?—I should suggest that.

28419. (*Chairman.*) A rule that every boiler should be inspected once a month?—Yes.

28420. You would put that into an Act of Parliament?—I would suggest it.

28421. Then you say that protectors should be fixed in front of all water-gauge glasses of boilers so as to prevent steam issuing and fragments of broken glass injuring the person who may be in charge, in case of an accident. Is that done generally?—It is done at large collieries, but I may say there are many that are not adopting that. Steam recently has been raised to such pressure, as much as 140 and 150 at some collieries, that if men are before those boilers and there is an explosion, fragments injure the men. We have sent in several claims recently upon that matter.

28422. You have had several accidents?—Yes, in that way.

28423. Do you find that there is any difficulty in getting the managers to agree to this?—We have not enforced that upon them. I know some managers adopt it themselves.

28424. That would be a very small matter?—It would be a very small matter, but it would be a great safeguard to the men. It might be the means of saving a man's face or head, and saving him from serious injury.

28425. In point of fact it has caused serious injury?—Yes, to some of the men.

28426. Then you say that each and every engine-house, either above or below ground, where steam pipes are carried under the floor or through such houses, shall be provided with two ways of ingress or egress. Is that generally done?—There are instances where it is not done, but very few. As a rule the managers are attempting to do that, but we put this down so as to have it a general thing.

28427. What is the object of it?—Supposing, for instance, a pipe explodes, and there is only one way to get out, a man would have to go through the steam; whereas if he had two ways he could get out by the other. There would be two ways of escape.

28428. Have you known accidents happen in that way?—One happened at Tredegar, I think it was two years ago. The men were repairing pipes down below in the shaft.

28429. (*Mr. Ratcliffe Ellis.*) In an engine-house?—It was not in an engine-house. It was going through; I thought that meant the same thing. There is also an accident which happened in Clydach Vale in the same way. I am not sure whether there are two ways of egress.

28430. (*Chairman.*) In some cases it would be very difficult to provide this second egress?—I cannot say. Underground, supposing there were two ways to go into the engine-house, so that the men could run out whichever way it was possible to escape——

28431. Do you think it would be reasonable to compel all mine managers to provide two means of egress? Would it not involve very considerable structural alteration very often?—I do not think so, especially in engine-houses, as is mentioned here.

28432. Do you think it ought to be made a General or a Special Rule?—Yes.

28433. You would have it put into an Act of Parliament?—I would.

28434. (*Mr. Wm. Abraham.*) You are speaking of on the surface?—At any engine-house, not only on the surface, above or below the ground. Allow me to give one instance. I was working an underground engine, and our engine was about 300 yards or more behind the pit. The place where the engine was situated was in an arch, and that was bricked behind, and the boilers were in front. If something happened to our pipes we should have to run through that steam, but I am pleased to say that our management saw the advisability of knocking the wall down and making a hard heading, so that we could get out another way. If something happened in front of the boilers we could go round the other way.

28435-6. (*Chairman.*) You want some alteration in General Rule 24.

(*Mr. Ratcliffe Ellis.*) It is a very important alteration.

(*The Witness.*) I will explain the idea we have. If you read Rule 24 it states: "Where any shaft, plane, or level is used for the purpose of communication from one part to another of a mine, and *persons* are taken up or down or along such shaft, plane, or level by means of any engine, windlass, or gin, driven or worked by steam or any mechanical power, or by an animal, or by manual labour, the person in charge of such engine, windlass, or gin, or of any part of the machinery, ropes, chains, or tackle connected therewith must be a competent male person not less than 18 years of age." Sometimes there is only one man riding, and to meet such a case I would suggest that the rule should read "where any shaft, plane, or level is used for the purpose of communication from one part to another part of a mine, and *any person or persons*, etc." I had a discussion with some of the managers in our district, and I sometimes suggest that wherever a rider is on a journey no man should be employed at the engine under 18 years of age. I have endeavoured to point out that is the meaning of the Act, but they reply by saying that the word "persons" means the plural and not the singular when I say "rider." My point is, if it is essential to look after the interest of persons, it is quite as essential to look after the interest of a person. I say that where riders are on the journey all day, then there should be a male person not less than 18 years of age. That is the reason.

28437. If something happened there would be only one rider. There is generally more than one?—Very seldom there is more than one; he might have an assistant.

28438. This would be a very considerable alteration of the law. You would have this competent person of 18 in many cases where he would not be required now?—That is right.

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28439. (*Mr. Smillie.*) Do you mean the managers claim that under this rule where only one person rides, the person in charge may be under 18 years of age?—Yes.

28440-1. (*Chairman.*) You must have somebody. The question is whether he must be over 18.

(*Mr. Smillie.*) They might start a lad of 14 or 15 who is not a competent person, and hide themselves behind the section.

28442. (*Mr. Wm. Abraham.*) What you simply want is that the same protection should be provided for the one man as there is provided for the many?—Exactly. That is my point.

28443. (*Chairman.*) You say that it is an important point because these competent male persons of over 18 years of age are not put on except when a number of men are conveyed to and fro?—I do not say that. I say at many collieries they put men on, say 22, or 23, and some 30 years of age; but there is a possibility, and there are some employers who find younger lads could do it—put these men on where riders are.

28444. Where there is one rider? You say, generally speaking, there would not be more than one rider?—Yes.

28445. (*Mr. Ratcliffe Ellis.*) That is where there is a train of full tubs in charge of one person, a person younger than 18 is put to manage the winding apparatus?—No, wherever you might get a strong lad of 18, if he can work the engine, they allow him to do so.

28446. That is where there is a train of full tubs in charge of one person?—One or two, it does not matter which.

28447. (*Chairman.*) It does matter. It is clear if the tubs are in charge of two persons the rule applies, and somebody over 18 must be employed?—We will confine ourselves to one. That will answer our purpose.

28448. Do you know as a matter of fact that the mine managers take advantage of the wording of this rule, and where one man alone happens to be in charge of a number of tubs a boy under 18 is sometimes employed in hauling and looking after the arrangements?—Yes.

28449. (*Mr. Ratcliffe Ellis.*) Can you say where that is?—I should not like to specify, especially in the large collieries where a number of enginemen are concerned.

28450. (*Chairman.*) You know, in point of fact, where one man rides in these tubs and the mine managers say the plural is used, and consequently it is only one man and this rule does not apply?—Yes.

28451. (*Mr. Ratcliffe Ellis.*) Can you give us some idea where these collieries are?—

(*Chairman.*) We should like to know. It seems an evasion of the rule?—It would apply to the larger collieries we have in South Wales. I could give you the names of those collieries.

28452. You could give us the names of collieries where this happens?—Yes.

(*Chairman.*) You do not want to do so.

28453. (*Mr. Wm. Abraham.*) You are willing to give those names to the Chairman if he wants them?—I could not give them at this very moment.

28454. I know that?—Quite.

(*Chairman.*) We should like to make enquiries about that. You will let the Secretary know?

28455. (*Mr. Smillie.*) Your evidence goes further and says you have discussed this with colliery managers, and they have invariably taken up the position that this applies to "persons," not a "person"?—Yes; that is right, exactly.

28456. (*Mr. Ratcliffe Ellis.*) Will you give the name at the same time of the colliery manager you have discussed it with?—Very well.

28457. (*Chairman.*) You go on to Section 57, sub-section 2. The section now reads: "The owner, agent or manager shall supply a printed copy of the abstract and the Special Rules gratis to each person employed in or about the mine who applies for a copy at the office at which the persons immediately employed by the owner, agent or manager are paid." I do not know whether if the man asks for it or not that they are bound to give him a copy?—That is my point. I think a copy of the rules ought to be supplied whether he applies or not. My object is this: when a prosecution takes place the men are charged with not carrying out the rules. Those men may not know the exact wording of the rules. We have had at inquests questions raised concerning this, and the men say they have never had the rules. The question is asked, did he apply for it? and then the manager is free, of course.

28458. You go on to discuss the question of the eight-hours' shift. Do you wish to add anything to what Mr. Rowarth said on that subject?—Yes. I want to go further. I am representing the whole of the colliery enginemen and stokers at the collieries. He referred more particularly to winding enginemen. I say that wherever engines and boilers require attention during the 24 hours, three eight-hours' shifts of men should be employed thereat.

28459. You do that in the interests of safety, I understand?—Yes.

28460. That is the only point we have to consider in our Commission?—That is right.

28461. You can only argue the eight-hours' day before us with regard to safety?—Yes, and I believe that it would be in regard to safety. Take winding enginemen. It has been stated here this morning we have some working a 12-hours' shift, but I am very pleased to say that the majority of our men in South Wales are working the eight-hours' shift.

28462. Winding men?—Yes. In some parts of our coalfield, more particularly in central Monmouthshire, I am also pleased to state that the fan enginemen are also working eight hours, and other enginemen as well. I say what is practicable at one place is sure to be practicable at the others.

28463. What have you got to say with regard to the increase of safety owing to hours being shortened?—It stands to reason that when a man is on duty 12 hours he is not quite as alert then as he is when he is working eight hours, say at the tenth hour or so. What we contend is that the man is fatigued.

28464. As a matter of fact he cannot keep his attention on the alert without an undue strain upon it for 12 hours?—Quite so.

28465. Have you known any accidents happen owing to the strain being too much for competent people? I do not mean accidents from incompetence, but accidents from over-strain?—I could not mention a particular case at present, only that we believe that it would be for the safety of the working of the mines that the men should work eight hours.

28466. Do you find in South Wales that sometimes where the coal hewers work 10 or 12 hours the engine-winders only work eight? Do you find it is on a different footing from the others?—Yes. In South Wales they are working 54 hours per week. That is equal to nine hours per day. Then the engine-winders, where they are winding over 300 tons a day, are working eight hours.

28467. (*Mr. Wm. Abraham.*) Practically speaking at all our large collieries enginemen work three shifts of eight hours a day?—Quite so.

28468. (*Chairman.*) Although in many cases underground they work nine or 10 hours?—Yes.

28469. (*Mr. Wm. Abraham.*) A few are working more than eight, but the large majority are working eight hours?—That is right.

28470. (*Chairman.*) Have you gone into statistics to find out what proportion of accidents is in mines where the winding men are employed eight hours and where they are employed for longer?—I have not got the exact figures as to the accidents, but I venture to say that 75 per cent. are working eight hours.

28471. Take it that 75 per cent. do, and that 25 per cent. work longer. Do you find, on looking over the list of winding accidents, that there is a greater percentage in the mines where the winders work more than eight hours than in those mines where they work only eight hours? Have you tried to get out those statistics at all?—No. I cannot mention any particular cases, because in our district where they are raising less coal they are working longer hours.

(*Mr. Wm. Abraham.*) You should explain to his Lordship in the districts where they are working long hours they are winding much less coal.

(*Chairman.*) There is not so much strain.

28472. (*Mr. Wm. Abraham.*) That is the point?—Yes.

28473. (*Chairman.*) You naturally would not expect to find more accidents where they are working longer than eight hours, because where they are working longer than eight hours there is less for them to do, and not so much strain on them?—Yes.

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28474. That might lead to another solution. Instead of having a universal eight-hours' day for winders, the Home Secretary might take into consideration the circumstances of each case.

28475-7. (*Mr. Wm. Abraham.*) We may have it out here at once. Is there any rule in force where enginemen have to wind 300 tons of coal and above that they are to have three shifts ?—Yes.

(*Mr. Wm. Abraham.*) I do not think we have much to complain upon this.

(*Witness.*) I have here the report on an arbitration in 1872. It is very old. Shall I read a portion of it ?

28478. (*Chairman.*) Yes ?—"The notices were held over, and a meeting of the trade took place at the Royal Hotel, Cardiff, on the 5th July, 1872, at which delegate engineers attended. The masters asserted that the 'agreement to refer' and award, included the engineers, and that inasmuch as the ironmasters had not altered the working hours of the engineers, the Associated Masters could not do so, but that they were willing to make the concession required of eight-hours' turn, or three men in 24 hours in the case of engines winding 300 tons of coal per day, because of the strain on the energies of the men and the greater risk to life and property."

28479. Might not that be a way out of the difficulty ? —I do not agree with it.

28480. You want it to be always an eight-hours' shift in all circumstances, whether the winding was 300 tons or not ?—Yes. A man might be winding 300 tons a day and working quite as hard as a man raising 600 tons a day, and even as hard as a man raising 800 tons a day. It depends upon the nature of his engine ; and if there are landings in the pit, it increases his work very materially. That makes the difference in taking out the number of tons raised.

28481. You say the number of tons raised is not a very good test ?—No.

28482. Of the work that is done by the enginemen ? —No.

28483. I mean of the continuity of the work done by the enginemen ?—No.

28484. You are not disposed to give any power of granting any exemption at all, under any circumstances, to working longer than an eight-hours' shift ?—No.

28485. You would make it universal and compulsory ? —Yes.

28486. At the same time in point of fact this 25 per cent. of men who are not working an eight-hours' shift, but a longer shift, are probably not harder worked as a rule than those who are working eight hours ?—But still I say that they are too many hours on duty. That is my point.

28487. The point is as regards safety. You cannot give the Commission any reason for supposing that in those mines where the eight-hours' shift does not obtain there are more accidents than where an eight-hours' shift is in force ?—I have not got those figures.

28488. You agree there may be cases where a man does not do any more work in nine hours, where there is not a greater strain in nine hours than there is in eight hours, but there might be circumstances which would make the strain as great on a man working eight hours as a man working nine hours ?—There is a possibility.

28489. With regard to the teaching of these winding enginemen, are you in favour of keeping the teaching in the hands of your Union entirely, or would you allow the managers to ask, as a matter of right, that certain persons should be taught the trade of engine-winding ? —What we believe is that promotion by seniority should be adopted where ability is combined. As has been suggested by the previous witness, a man should start either at the boilers or at small engines underground, and work himself up to the winding engines.

28490. I quite understand that. Would you prevent a person beginning at the beginning and going to the top, if anxious to become an engine-winder, and his character was good ? Would you insist on his belonging to the Union as a condition of his getting the certificate ?— We have not enforced that at all. We are endeavouring to get fair play for the men, that they should start from the beginning and go up to the top.

28491. I quite understand that, but that does not answer the question. Would you impose any restrictions whatever on a manager who wanted any number of persons to be taught the trade of engine-winding ? Supposing the manager agreed that your condition should be accepted, and that the man should begin at the beginning and go through the mill the same as you want him to do ?—We do not believe in having too many taught at the engine.

28492. You mean you would not be able to teach more than a certain number ?—That is right.

28493. The number ought to be limited simply by the opportunities of learning that could reasonably be afforded? —Yes.

28494. Subject to that you do not wish to limit the number in any way ?—For instance, we always agree that a spare hand man should be ready in case any of the enginemen are taken ill.

28495. I was asking about the teaching of these men. There are a certain number whom the managers want taught the trade of engine-winding and who want to be taught themselves, whether the managers wish it or not. You say they should go through certain training. Supposing they are willing to go through that training, then you say that there must be some limitation to numbers, as it is impossible that that kind of training can be given to any number of men at the same time. There must be some limitation according to the teaching capacity of the men employed in the winding work. Subject to that, you do not think there ought to be any limitation placed upon the number of men who would be taught engine-winding, nor do you consider it desirable that it should be absolutely necessary in order to obtain a certificate that they should be members of your Union. Do I understand you agree to those two propositions or not ? —We have not at all prevented any men the management have put forward becoming winders, only that they go through the proper course.

28496. You have always accepted and taught to the best of your ability anyone the managers have wanted you to teach ?—That is if he has come in proper rotation, that is, come from the bottom of the ladder up.

28497. You reserve to yourself the right to refuse a man on the ground of bad character or deficient intelligence or anything of that sort ?—Quite so.

28498. In point of fact you have never refused anybody on either of those grounds ?—I do not remember.

28499. There has been no friction at all between you and the managers as regards the number of men to be taught the trade of engine-winding ?—The only friction there has been is this : I want to raise this point because it has been raised some time back, I think. It is Q. 8310 in the evidence of Mr. Gray.

28500. (*Mr. Ratcliffe Ellis.*) It is a question Mr. Davis asked ?—Yes.

28501. With regard to some difference that there was ? —Yes.

28502. (*Chairman.*) That is the point : you wanted to compel the managers to choose the men in rotation. That is the difference ?—That is our point.

28503. You may have a lot of men in a list, and you are satisfied that they are all competent, and you say the manager should take the next man on the list and should not have the choice ?—What we advocated was that the men who were practised—the senior hands—should be appointed to the engine. What we object to here is this : it says that we insisted upon the senior man in order, but we say we insisted upon the senior man in order where capability was combined.

28504. The senior man who was considered by your union as being competent, who was on your list as a competent man ?—At any rate, he had been practised by the company for some months. That was the point raised. I want to emphasize this point. The very man that was objected to on that occasion, not only one, but there were two or three—but one in particular is winding now, and has been these years, and, so far as we find, giving every satisfaction.

28505. There has been friction between you and the managers because you want the managers to take men in rotation on a list of competent men ; on the other hand, the managers want to choose for themselves men out of this list and take anybody they wish : that is the difference between you, but there has been no friction I understand owing to your wanting, as the managers consider, to unduly restrict the number of men to be taught this trade of engine-winding ?—No, there has been no dispute in that way. I may say that the man the management were desirous of putting in we agreed to, and the management afterwards put in the men that the workmen asked for.

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28506. Supposing there was a competent school possibly supported by the managers to teach men engine-winding, I suppose you should be satisfied that the training was sufficient training and anybody who passed that school could be a competent engine-winder, would you object to anybody obtaining a certificate from that school because he did not choose to belong to your trade union, or would you insist upon his belonging to your trade union ?—In reply to that, we should not object so far as that is concerned, but we may say that because a man has a certificate he is not necessarily a capable man to do the work as a winding engineman. A certificate is one thing, but the practice which is in vogue now is quite as necessary.

28507. I was supposing in this school they trained a man, whatever he wanted to be, a winding engineman or a stoker. If they taught the man his trade thoroughly, I wanted to find out whether you would insist upon a man being a member of your union before he should get a certificate of competency. Would you allow a certificate of competency to be given to a man outside your union, or would you make it a condition of getting it, although in every other way perfectly well qualified ?—We believe he ought to be.

28508. You would like to make that a condition if you could ?—Yes.

28509. (*Mr. Smillie.*) You would never think of laying it down as a condition that he must be a member of your trade union to get a certificate ?—I would not put it in that way.

28510. (*Mr. Ratcliffe Ellis.*) You would not teach him unless he was : that is the point ?—That is the rule more particularly.

28511. (*Mr. Smillie.*) He might be taught and secure a certificate ?—Exactly. You have taken me off the point if you will allow me to explain one thing. It says in Mr. Gray's evidence to which I referred that an accident happened.

28512. (*Mr. Ratcliffe Ellis.*) This is the question which was put (Q. 8315) : "Do you, in the case you refer to, know that the Enginemen's Union threatened to bring out the whole of the men and stop the colliery unless their particular man, the next man in order, was selected as the winding engineman." Mr. Gray, to whom that question was put, said, "I believe that was so." You can tell the Commission whether that was so or not ?—They have mixed up two cases.

28513. Will you answer my question whether in that case the Enginemen's Union threatened to bring out the whole of the men and stop the colliery unless their particular man, the next man in order, was selected as the winding engineman. Mr. Gray, the Inspector, said, "I believe that was so." You, as representing the Enginemen can tell the Commission whether that was so or not ?—The men threatened that they would discontinue working if the men in order of seniority, according to what is the practice, were not allowed to go to the engines.

28514-5. It is the Enginemen's Union I am talking about. Did the union threaten to bring out the whole of the men and stop the colliery unless their particular man, the next man in order, was selected as the winding engineman ?—In this particular case they did refer to it, but you are mixing two cases.

28516. "The Enginemen's Union threatened to bring out the whole of the men and stop the colliery unless their particular man, the next man in order, was selected as the winding engineman ?"—That is quite so in this case.

28517. (*Mr. Wm. Abraham.*) Are you perfectly correct now ? Was it not done by the men that were working in that place ?—Yes, in that place.

28518. (*Mr. Ratcliffe Ellis.*) My question was the Enginemen's Union.

(*Mr. Wm. Abraham.*) He said "Yes," but I know it is wrong ?—The branch you mean.

28519. (*Chairman.*) They had not the authority : that is the point. They might not have been able to carry out their threat ?—That is right.

28520. (*Mr. Ratcliffe Ellis.*) It either was the Enginemen's Union or the union in some other form which would say that all the men were to come out and stop the colliery unless the enginemen had the appointment of the engine-winder ?—That is so, the men at that colliery.

28521. What responsibility in law, or in any other way, is there upon the Engine-winders' Union or the Trades Union if a man appointed is not a competent man ?—But the men did not carry it out.

28522. Will you answer that question ? I want to go by steps. What responsibility is there upon this authority which claims the right to appoint the enginemen, if the man appointed is not a competent man ?—The union has no responsibility, but they are not going as far as that.

28523. Who is responsible if a competent man is not appointed ?—The manager.

28524. Do you think it right that the manager should remain responsible and that the union should appoint the engine-winder ?—No, we have not gone so far as that.

28525. Is that in the interest of safety in your view ?—No, the men have not gone so far as that.

28526. Will you answer my question ? In your view is it in the interest of safety that the manager should remain responsible, and that he should not have the right to appoint his man as engine-winder, but that the union who have no responsibility should be the persons to appoint the engine-winder. You put to the Commission in your view that is in the interests of safety ?—I say that the manager should be the person responsible, but that the men should have a right to put their case before the managers.

28527. That is not quite what you did in that case. In that case we have got as far as this. In this particular case we are dealing with the Engine-winders' Union, or whatever the authority might be, which insisted upon appointing the engine-winder, and they said "If we cannot appoint that man we will stop the pit." We agree in law the manager is responsible if an incompetent man winds. Do you say it is in the interests of safety that he should remain responsible and an entirely irresponsible body should make the appointment ?—No ; we say he should be responsible.

28528. You would not go so far as that ?—No.

28529. What is your suggestion for meeting that difficulty. This is a concrete instance of how you would apply your power ; you claim to appoint a man ; you have no responsibility, and you leave the responsibility to the man you will not let appoint the winder ?—The management had appointed this man.

28530. We will deal with the abstract question first, before we go into detail. What is your suggestion now ; do you say you should leave the manager responsible, but not allow him to appoint the engine-winder—that the man must be appointed by the Engine-winders' Union who have no responsibility ?—We say we have allowed the management to make the appointment.

28531. In this particular case. We know what the facts were there ?—We have allowed the management to appoint.

28532. You do not propose to give me any answer to my question with reference to this particular case ? Once more I put it to you : in this case you required that your man must be appointed, and not the manager's man. You agree that the manager is the responsible person, and that you have no responsibility. Do you suggest that it is in the interests of safety that the manager should be left responsible, but that the engine-winder should be appointed by an irresponsible authority ?—No, I do not think so.

28533. That is what you wanted to do here ?—No, we did not.

(*Mr. Wm. Abraham.*) That is not correct.

(*Chairman.*) A certain member of a Trades Union wanted to. The witness does not agree with the attitude taken up by the particular persons who acted thus.

28534. (*Mr. Ratcliffe Ellis.*) Do you disagree with the attitude taken up at that time, that is, a threat to bring out the whole of the men and stop the colliery unless their particular man, the next man in order, was selected as the winding-engineman—do you disagree with the action that was taken there ?—Not exactly in the way they put it.

28535. Do you disagree with the action that was taken as described in this question ?—I advised the men not to press their opinion.

28536. You disagreed with the action that was taken ?—That is it.

28537. Is it a fact that the man who was appointed, namely, the man the men said must be appointed, had an overwind in the course of a few days after he was there ?—That is the point I want to come to. I knew nothing about that case until I saw it here.

(*Mr. Wm. Abraham.*) That is not a fact.

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28538. (*Mr. Ratcliffe Ellis.*) He says he did not know anything about it until he saw it here.—Yes.

28539. (*Chairman.*) You do not know; you have not made inquiries?—I have made inquiries since I saw it here.

28540. (*Mr. Ratcliffe Ellis.*) You say you never knew there had been an overwind until you saw it here?—Not at all.

28541. Since you have seen it here have you inquired about it?—I have made inquiries.

28542. You can hear nothing about it?—I went to see the men to see whether this was correct, and this man had not had the charge of the engine. He was an apprentice, and it appears an accident happened when he was there as an apprentice.

28543. (*Mr. William Abraham.*) He was not in charge of the engine when the accident occurred?—No; that is the information I received.

28544. (*Mr. Ratcliffe Ellis.*) Your information is that the winding man appointed by the Engine-winders' Union was not in charge when there was an overwinding?—This man was appointed by the management.

(*Chairman.*) What I understand him to say is that this man did make a mistake in winding while an apprentice.

28545. (*Mr. Ratcliffe Ellis.*) The question that is put is this. It is No. 8319: "And they had an overwind in the course of the first few days this man was there. Do you remember that?" I understand the witness to say although this new man was nominally in charge at the time of the overwinding, he was not in charge of the engine, but that an apprentice was?—Yes.

28546. The inspector was not informed of that, evidently?—Evidently, so far as I see here.

28547. (*Mr. Wm. Abraham.*) Will you put this right before you go further? Whatever happened did not happen in the hands of the man you wanted appointed?—No.

28548. (*Mr. Ratcliffe Ellis.*) Who told you it did not happen in the hands of the man you wanted appointed?—Because you are mixing up two disputes.

28549. That does not answer my question. Who gave you the information you have just given to the Commission that it was not this man who was appointed at the instance of your Union who caused the overwinding. You have made inquiries?—Yes.

28550. Who has told you that it was not this man?

28551. (*Chairman.*) What inquiries did you make?—I went to the pit and inquired from the men as to how that accident happened.

28552. (*Mr. Ratcliffe Ellis.*) What man gave you that information?—He is working in the colliery.

28553. This is a question affecting the engine-house?—Yes.

28554. How do you know at the time of the overwinding that the engine-winder proper was not in the engine-house?—He was in the engine-house at the time.

28555-6. Why do you say he was not responsible for the overwind?—I say that it was the apprentice, the man practising, who was at the engine at the time; the other man was in the engine-house.

(*Mr. Smillie.*) It was given in evidence that because he was incompetent an accident took place. He might be in the engine-house and have charge, but it was not because of his incompetency if the witness is correct.

(*The Witness.*) Is that matter perfectly clear now?

(*Mr. Smillie.*) You will have an opportunity of clearing that up with Mr. Abraham. I think it is necessary that it should be absolutely clear.

28557. (*Mr. Ratcliffe Ellis.*) You say that periodical inspection of all colliery engines and boilers should be made by an inspector appointed for such specific work by His Majesty's Government. Is this an inspector to be appointed solely for this purpose, or would you give instructions to the Inspectors of Mines that they should make an inspection of these engines and boilers?—I would suggest a special inspector for this class of work.

28558. Is it to be merely for mines or generally?—I am here to-day looking after the interest of mines.

28559. Your suggestion is that there should be a person appointed to inspect engines and boilers in mines?—That is so.

28560. Your difficulty, as I understand, with reference to boilers is that they are not cleaned out sufficiently often?—That is so.

28561. In some Special Rules there is a provision made, I think. In the Lancashire Rules there is this Special Rule; it is No. 91: "After the cleaning of any boiler he shall examine it externally and also the mountings. He shall also see that it is examined internally by the person appointed. No boiler shall again be set to work unless so examined and passed." If that rule was carried out, and there is a person appointed at the colliery to examine the interior of the boilers, would not that meet your objection?—If a person is appointed at the colliery?

28562. Yes, a person appointed at the colliery to examine the interior of the boilers, and that he did make that examination?—I may say that at present the responsibility is placed perhaps upon the foreman of the colliery, but I should say that there ought to be a person appointed by the Government to go round these boilers periodically.

28563. Why should not the Inspector of Mines, who is appointed see that this is done?—If he finds that he can do it, but I thought a special man for this particular purpose, perhaps, would have a better opportunity of doing this class of work more particularly.

28564. There are many sources of danger about a colliery. Why do you select boilers to be under some particular inspector? Would you also have an inspector detailed to look after other things at the colliery?—I am putting this under the engineering department, engines and boilers. I do not confine it to boilers alone.

28565. Engines and boilers?—Yes.

28566. Do you think there are so many accidents in connection with engines and boilers failing as to justify your suggestion that some special person should be appointed to inspect them?—I believe that another person appointed in that way would be more of a safeguard. We are fortunate; we have not had many accidents, I agree, but still we think inspection of the boilers, as I have already mentioned, should be made. In some places they clean them periodically every month; in other places they may run for three or four months. This particular inspector should then be empowered to say that they should be cleaned oftener, and so forth.

28567. A good deal, as you say, would depend upon the water?—Yes.

28568. Have you noticed the number of accidents arising from the explosion of the boilers? Have you any statistics to show how many there are?—I have not any statistics. I simply get it from the men that they clean them in some places.

28569. I want your own judgment about it. Do you think there are so many accidents arising from defective boilers as to require some inspection of them more than there is at the present time?—I do think through South Wales one man should be appointed for this class of work.

28570. Do you think there are so many accidents arising from explosions of boilers as to require, in the interests of safety, that some inspector should be appointed whose sole duty should be to examine boilers?—That is my opinion.

28571. How many accidents during the last five years have arisen from boiler explosions?—I am not going so much upon the point as to the number of accidents, but I am looking at it from the report I am having as to the different mode and time of cleaning boilers in the various districts.

28572. Is it not important to see whether some indication that those boilers are in such a dangerous condition is given by the number of accidents. Do you not think that you should have information about that before an inspector is appointed to look after them?—I do not know about that, but that is my opinion.

28573. Because the men tell you so?—Exactly.

28574. If there is an explosion in a boiler, there is a searching enquiry made by the Board of Trade?—Yes.

28575. Is that not sufficient?—No. They simply give a report of an accident, and we want to try and avoid them. That is my point.

28576. With reference to engines, are there many accidents arising from defective engines?—In reference to that point, the reason we want to make this inspection is that there would be no accident occurring at all. Now it is difficult sometimes for the workmen even to detect and point out to the management a certain defect. This particular inspector then could do that class of work.

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28577. Are there many defects to be reported?—Perhaps it has not come to light. The information we receive is from the workmen, that their engine is in such a condition, and so forth, and we have to go by that, and that is the reason we give that evidence.

28578. Have you any details of complaints made by workmen about defective engines?—Simply what we have at meetings. I have not put them down in that way.

28579. You have no statistics to show in any way that there are such a number of defective engines as to justify your suggestion?—No.

28580. With reference to gauze protectors, there may be protection given without obscuring the glass. You want to see through this glass?—Yes, and thicker glasses in front of the others.

28581. They are generally adopted?—In a large number of places.

28582. With regard to this double exit to an engine-house, I suppose that is to provide a means of escape if there should be some bursting of a steam-pipe between him and the door?—That is right.

28583. That is so that he could get out of the door. How many cases have you known of that where a man was prevented getting out the ordinary door because a steam pipe burst?—So far as engine-houses are concerned I have only mentioned one, of course.

28584. Over what number of years?—That happened two or three years ago.

28585. You have known of one case. What were the conditions of that case? What did happen in that particular case?—The pipe burst.

28586. Was it a winding engine-house?—Yes.

28587. On the surface?—Yes.

28588. A pipe burst?—Yes.

28589. Could he not get out?—At any rate he was scalded, and one or two deaths occurred.

28590. Did the pipe burst between him and somewhere near the door? Was it in consequence of not being able to get out? A man may be scalded by a pipe bursting. Did the pipe bursting prevent him getting out of the door?—I am not positive of that case. I am more positive of the Tredegar case.

28591. What case is that?—Two men had gone down to the shaft where the pipes were leaking, and there was no place to run, and they had to come to the pit and fell down.

28592. It was not in an engine-house?—No, those pipes were leading to that engine-house.

28593. Let me remind you: your suggestion is "That each and every engine-house, either above or below ground where steam pipes are carried under the floor or through such houses, shall be provided with two ways of ingress or egress." Can you give me a case in which a man was prevented getting out of an engine-house, who thereby suffered an injury because a steampipe burst and prevented him getting out of the ordinary exit?—I cannot give you a specific case.

28594. Can you give me any case?—Without going into particulars about it, the only thing I know is that there were two men scalded at that place.

28595. That was not in an engine-house in the Tredegar case?—That was in the pits.

28596. In the case where the man was scalded in an engine-house, you do not know whether it was because he could not get out?—I am not positive.

28597. Do you not think it is a drastic alteration to suggest, because you have not known of a case, where a man could not get out of a door, that two doors should be provided?—No, I do not think so. What I mean is a door in the front and a door in the back.

28598. He can only go out of one door at the time, however many doors there are. You have not known a case where mischief happened because the man could not get out of the one door?—No, I cannot specify that.

28599. You think that certificates should be required not merely by engine-winders, but by the men who attend to any engine about the place? You said you would go further than the previous witness and let it apply to every sort of engine?—That is so.

28600. That is your view?—Yes.

28601. What sort of engines are there about collieries outside winding-engines?—There are fan engines.

28602. Donkey engines?—*Hauling* engines.

28603. Donkey engines?—If you want to put them in, yes.

28604. Is a man to have a certificate for that?—We say that the men would be very much more prepared in cases of emergency if they have certificates than if they have not.

28605. Do you think it would make any difference whether he had a certificate or not for an emergency?—Yes.

28606. Do you find any difficulty now with the enginemen, none of whom have certificates, in meeting emergencies?—I think they would be more equipped.

28607. With regard to the Special Rules that you suggest should be given—this is going rather outside your province as representing the enginemen?—No.

28608. You want them to be given to every workman, I understand?—Yes, because if it is necessary to our men such as enginemen, stokers, etc., I think it is necessary for all men at the colliery.

28609. Do you think it is too much to ask a man seeking employment to apply at the office if he wants to know the conditions under which he is to be employed?—I will put it in this way: when men are applying for work in the colliery generally, they may not know that such Rules are in existence so far as these Rules mentioned herein are concerned. Very well: it would not be natural for them to ask for them because they do not know they are in existence.

28610. Do you think that there are many men working at collieries who do not know that there are Special Rules?—Yes.

28611. A good many?—Yes.

28612. Do you propose that they should give them back when they leave the employment?—Yes.

28613. Do you see any objection to this, that they should be charged 6d., to be handed back when they return the rules, or charged something for the rules and handed back that money when they return the rules?—I suggest if they do not return the rules a certain charge should be made.

28614. Would you have any objection to the charge being returned by the coal-owner when the rules are returned?—The only difference between the two is, I say charged when they pay off, and you want to put it on before, a charge of 6d., but the man would not have interest on it.

28615. I say he should have his 6d. back when he returned the rules?—I say if he did not return the rules that amount should be kept for the rules.

28616. (*Mr. Wm. Abraham.*) As I understand, you, on behalf of your organisation, do not want the power to appoint enginemen at collieries?—Certainly not.

28617. You do not want to remove that responsibility from the management?—Certainly not.

28618. What you want is that from a number of competent men they should be selected in rotation?—That is right.

28619. The case in point was that your men wanted to protect one of their number because they thought he was victimised?—Yes.

28620. Not because they wanted the power to appoint the engineman?—Quite so.

28621. In justice to you I think I ought to put that right?—Thank you very much.

28622. Taking a broad view of what you have stated to-day, it is not so much the number of accidents that happen in your view, but that those that have happened could have been avoided if the amendments you now want had been in force before?—That is my opinion.

28623. It is more of a prevention than a cure after the thing has taken place?—Certainly.

28624. That is the position you are taking up?—That is the position we are taking up.

28625. I think there is one thing we are entitled to clear up with regard to the point you have been pressed upon. What is the real source of your information respecting the man who had been accused, if you like, or a charge had been made against him by the inspector, that he, being incompetent, was the cause of over-winding? You have investigated that case, and Mr. Ellis asked you whom

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did you see. Can you clear that point up ?—From one of the men working on the Colliery: that is where I have had the information.

28626. Was that man in the engine-house ? What was his source of information ? He might have been informed from another man as well as you ?—I sent to ask for that information, and I had it. It was stated that this man was there as an apprentice, and that he had not had the charge of the engines at this time when this occurred.

28627. Was this apprentice under the charge of the man accused ?—I cannot say about the accusation.

28628. You know the case. It has been said after this man had been appointed that this accident occurred while the engine was in his hands ?—That is what I want to explain.

28629-30. Will you explain it ?—Where the dispute occurred was at Fochriw, about five years ago. I am coming back to this point. The management wished to put another man in, and that man was allowed to go in. The man we wanted to go in has been put in since then, and another one also, and they are doing their work, and I have not heard of any accident with them. Now to come to this point where they have been mixing those questions up. An engine-winder was required at the Bedlinog pit in the same Company. The management put that man in and this occurred, so that the men had not been near the management in connection therewith.

28631. It was not the man they wanted that was appointed ?—The management accepted this arrangement of putting the senior hand at the engines, and they put him at this other pit, not at the time this unpleasantness arose between the men and the management. This occurred about two years ago. That is what I want to explain; they are not the same circumstances. I may say so far as I know for the last 20 years it has been the custom at this colliery of appointing senior hands if they are capable of doing the work. Is that perfectly clear ?

28632. I do not know that it is much clearer now. We wanted definite information because, after all, here it is a question of safety. We want definite information that that accident did not occur in the hands of the man you defended ?—That accident did not occur under the man that we wanted appointed.

28633. What we would like to know is what is the source of your information on that point, which we consider to be a reliable source. Can you give us that ?—As regards this information, I made inquiries from the men at the colliery, and they know nothing about it.

28634. (*Mr. Ratcliffe Ellis.*) I think we cannot go much further than that if they know nothing about it ?—About an accident with the man they asked to go in.

28635. (*Mr. Wm. Abraham.*) Does that mean it did not happen; that there was no accident ?—No accident at the place where we were asking for the man to go in. That is the point I want to press. This happened where the management put the man in themselves.

28636-40. In another place ?—Yes, at another pit.

28641. (*Mr. Smillie.*) Rule 24 of the Special Rules is the rule which places the responsibility on the manager ? Of appointing a competent person to act as engine-winder ? —That is so.

28642. It says: "In any mine which is usually entered by means of machinery, a competent male person not less than 22 years of age shall be appointed for the purpose of working the machinery" ?—That is right.

28643. I take it that that is appointed by the manager ? —That is appointed by the manager.

28644. Of course the engine-winders as an Association would never think of taking that responsibility off the shoulders of the manager ?—No.

28645. Mr. Ellis put it to you that the person who has the responsibility, which is the manager, should have the right of appointment, and you agreed with him ?—I agreed with him.

28646. He put it to you what responsibility had the engine-winders, and I think you seemed to say that they had no responsibility ?—No, so far as appointing the men.

28647. Not so far as appointing is concerned ?—That is right.

28648. Has the engine-winder who is appointed not some responsibility if he makes a mistake ? Is he not charged before the Court ?—Quite so.

28649. To that extent he is responsible ?—He is responsible in that way.

28650. If he is a member of your organisation do you not undertake the responsibility of defending him if you believe he is right ?—We do.

28651. If you believe he is not to blame you take the responsibility of defending him ?—Yes; our rule states distinctly where a man has neglected his duty, or is incompetent, or anything of that sort, of course he loses all privileges.

28652. Your Association is not prepared to defend a man you believe has been negligent or incompetent ?—Quite so.

28653. Where does the responsibility of the manager really come in ? He appoints a person to be an engine-winder who may not be competent, and that person makes a mistake and an over-winding accident takes place. Where does the responsibility of the manager come in ? Is it not sufficient for the manager to say "I believed that this person was competent ?"—That is so.

28654. So far as a Court of law is concerned ?—So far as a Court of law is concerned.

28655. So that his responsibility merely lies in saying: "So far as I knew, this person was competent ?"—Quite so.

28656. Supposing that person held a certificate of competency, then the manager would say: "This person held a certificate of competency, which was a proof to me that he was a competent person ?—I would not personally say that it was all the duties of an employer towards appointing a winder. Although he has a certificate he ought to find out that that man is a practical man as well.

28657. I quite agree with you. It is the duty of a manager in his own interest, I suppose, to make sure that the person whom he has appointed is thoroughly qualified and has practical experience ?—Quite so.

28658. That is quite natural. I wanted to find out really where the responsibility of the manager lay. Supposing six men are killed through an over-winding accident, and it is proved in Court that the engine-winder has not had sufficient experience to justify him in claiming to be a competent person, the manager who appointed him goes to Court and says so far as he knew he was a competent person. Does not his responsibility rest there ? —It rests there.

28659. He cannot be in any way prosecuted if he has taken all reasonable means to prove that he is a competent person ?—That is so.

28660. Consequently his responsibility is not nearly so great as the responsibility of the person appointed ?—That is the point.

28661. I wanted to make that clear ?—And I may go further; I find that some of them very often take a man

28662. (*Mr. Cunynghame.*) Some of whom ?—That the managers very often prefer taking a man on who has a reference from another colliery, who has been winding before simply in preference to their own men who have practised, so that if an accident happened they would say: "I had a reference from this man, and as far as I knew he was a practical and capable man." That is easier for them sometimes than training their own men, men they knew from their boyhood. I think that is one of the reasons some take that course more than others.

28663-6. (*Mr. Smillie.*) With regard to your point as to the examination of engines and boilers, I am going to refer to the Bristol and Somerset, Monmouthshire and Forest of Dean Rules. Rule 58 says the enginemen or other competent person appointed for the purpose shall see that the boilers ordinarily in work are regularly and properly attended to and cleaned not less than once in every three months ?—I have not got that.

28667. Is that the rule in your district at the present time ?—No, we have not that in our rules.

28668. Would it be satisfactory if you had that ?—Yes, I think that would meet the case.

28669. Let me call your attention to that: "The engineman or other competent person appointed." If that were in the hands of the engineman to make sure that a periodical and regular examination at least once in every three months was made, that would be satisfactory, if the engine-winder had the power to do so ?—What I feel is that too much is placed on the shoulder of the engineman under whom he is employed. I believe that an independent person

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periodically inspecting the whole of the machinery department should be the person to say so. The difficulty would be for the engineman to dictate to the manager how often they had to clean their boilers.

28670. This rule says that once at least in three months it must be done. That is Rule 58. It says an engineman or other competent person shall have power to see that certain things are done. I want to ask you something with regard to that. Would you rather have a person appointed on behalf of the Government to make a periodical examination?—Yes.

28671. Is that a cursory outside examination of the boilers, or is it a thorough examination of a boiler when it is blown off and cleaned?—What I suggest is that there should be an examination by this person apart from what is done by the person appointed on the particular colliery.

28672. The examination of a boiler might be made from the outside, as it were, and there might be failures which could not be discovered unless the boiler was blown off, emptied, and cleaned?—Yes.

28673. Do you merely mean a periodic monthly or quarterly examination of the outside appearance?—No, the inside appearance.

28674. It would mean that the boilers would require to be blown off and cleaned out?—Yes.

28675. You think that should be done by a person appointed by Government, once a month?—That is so.

28676. That is your opinion?—I should like to correct that, so far as once a month is concerned: that might be more often than necessary. If the man went round once in three months it would be sufficient for him to decide how often those boilers had to go out.

28677. That is in the interests of safety?—That is all.

28678. I suppose your own opinion is that boilers might be allowed to go on until they became absolutely dangerous?—Yes.

28679. An engine-winder might not know of the existing danger because of want of a thorough examination?—In our district there are many instances where engine-winders do not see into the boilers at all. It does not come within their province. It depends entirely on the boiler feeder, or the stoker.

28680. So that they might not be aware of any dangers there?—Yes.

28681. You admit an eight hours' working day is desirable for all persons employed in any class of engines or boilers in or about a colliery?—I do.

28682. This Commission is chiefly concerned with accidents, and the safety of underground workers and those employed in and about a mine?—I quite understand that.

28683. Mr. Abraham and I meantime are chiefly concerned with persons who raise and lower workmen. It does not apply generally in Wales, but do you think that long hours for engine-winders in collieries tends to want of safety?—I do believe that.

28684. You, yourself, have had considerable experience as a winding-engineman?—I have.

28685. From your own experience, and from what you have learned from your fellows, it is an increasing source of danger for men to be employed as engine-winders for long hours?—Quite so.

28686. Extended hours?—Yes.

28687. You believe it would tend to safety underground if the hours generally of engine-winders were limited to eight per day?—Yes, apart from any quantity at all.

28688. Apart from any quantity of material wound?—Apart from any quantity at all of coal raised.

28689. You have in South Wales perhaps 60 or 75 per cent. of the engine-winders whose hours are limited to eight per day, because of the fact that they wind 300 tons per day?—That is so.

28690. An engine-winder may only wind 150 tons per day, but he may have other duties in addition to the winding which may be his ordinary duties, as if he was winding the 300 tons?—There are some instances in that way.

28691. (*Mr. Cunynghame.*) There are some mines in which a man only winds 150 tons?—Yes.

28692. (*Mr. Smillie.*) My point is that in Wales, by mutual agreement, they have agreed that eight hours are the hours for engine-winders where the output in a shift is over 300 tons?—May I be allowed to say one thing further: there are instances where the employers do not carry that out.

28693. Then they are not carrying out the agreement?—So far as I read it out to you this morning.

28694. Is that 300 tons of coal?—We claim 300 tons gross: 300 tons of coal raised from the pit. The employers are endeavouring to explain that it should be 300 tons of large coal.

28695. Supposing an engine-winder raises 250 tons of coal and may require to wind 100 tons of foreign matter altogether, stones and so on, would that count as 300 tons?—Not at all.

28696. An engine-winder might require to wind 500 tons of water in his shift, and he would not come under this rule, 300 tons of coal?—Quite so.

28697. It would be almost as difficult work to wind water or stones as it is to wind coal?—Yes.

28698. There is not any difference so far as the engine-winder is concerned?—Not at all.

28699. Your rule confines it to 300 tons of coal, and an effort has been made to confine it to 300 tons of round coal?—That is right.

28700. That is entirely a matter between the employers and yourselves of course, in the meantime?—Yes.

28701. I want to come back to my point, an engine-winder can wind 150 or 200 tons of coal from the pit, and might be performing other duties when he was not winding. He might be attending to a haulage engine, or some other engine, in his spare time?—We have some doing that, but they are very few.

28702. In some districts you mentioned it was pretty common?—In some districts in Monmouthshire. I cannot say it is very common.

28703. You only speak for South Wales?—Yes, and Monmouthshire.

28704. In a case of that kind, you hold it is as necessary for an engine-winder to have eight hours whether he is winding 300 tons of coal or more?—That is so.

28705. Running the risk of repeating myself, I want to be clear what your position is with regard to certificates for engine-winders. You feel, and your people feel, that no manager should have the right to come in at any time and dictate to an engine-winder as to whom he should teach that particular trade?—We as enginemen claim, if we object to the man, that we should have that right.

28706. That you should have the right to object?—Yes.

28707. The manager of the colliery would have the right, as manager, to use the engines for the purposes of teaching a person when the engine-winder was not there at all?—Quite so.

28708. He always possesses that right?—Yes.

28709. The engines are under his charge when the engine-winder is not there?—Yes.

28710. He would be entitled to teach a person?—Exactly.

28711. I suppose the majority of colliery managers are capable of working a winding-engine, not for a regular thing, but capable of winding, I suppose?—I do not know, but I should say a large number of managers are capable of winding.

28712. Do you know some colliery managers who could wind a cage up and down?—Yes.

28713. Who are engineers in addition to being colliery managers?—Yes.

28714. Neither the engine-winders nor the Engine-winders' Association would think of dictating and saying "You are not entitled to come to the engine-house when we are not here and teach a person?"—They have never objected in that way that I know of.

28715. Mr. Abraham and I want especially to be clear of this: your chief desire is to produce a class of engine-winders who will secure the greatest possible safety to the persons working underground?—That is so.

28716. Your Association as a Trades Union takes considerable pains to make sure that only steady competent persons will be taught by your Association?—That is right, and I think that we are emphasizing the point that has just been dealt with, that we are striving for safety, otherwise we would not advocate certificates of competency

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for the men. Take that case that has been raised between the men and the management. Supposing that certificates were in force then, that man could not have gone into the engine-house. Can you see the point?

28717. Yes, he could not have had a certificate?—That is right, if he had not passed his certificate of course.

28718. (*Mr. Ratcliffe Ellis.*) He would have got a certificate if the law came into operation as to service?—This man was a pumping engineman before he went to winding. Under the proposed certificates this man would have to hold a first-class certificate.

28719. (*Mr. Smillie.*) Would it have been possible for the person whom you allege was guilty of this over-winding accident to have secured a certificate of competency if he stood an examination?—I do not allege that he was guilty of over-winding.

28720. You say an overwinding accident took place at a different pit where the manager put in a different man?—It is another place.

28721. Is that the case in which this person had only attended to a pumping engine before?—Yes.

28722. Had he been taught a winding-engine?—No. He was apprenticed for it.

28723. He would have taken a certificate by examination?—I do not believe so.

28724. Is there anything at the present time to prevent colliery managers in the event of a strike taking place, or a lockout of the engine-winders in South Wales, starting generally incompetent persons as engine-winders? There is nothing to prevent them: they can put anyone in.

28725. Except the provisions of the Mines Act which says "competent persons"?—That is right.

28726. A manager may satisfy himself that a person is competent by asking whether or not he has been an engine-winder previously?—That is so.

28727. The only responsibility is that he requires to say: "I did my best to find out whether he was a competent person"?—That is so.

28728. He does not require to ask for a certificate as to whether or not he was really a competent engine-winder?—He has not at the present time. I should like to add something as to the necessity for eight-hours' shift for winding-enginemen because of the responsibility of their duties. I say that there are other enginemen whose duties are very responsible, and that 12 hours is too long for them to be on duty. I refer to the fan enginemen. In our district we have collieries where there are about 1,000, 1,200 more or less, of men working underground, and they depend upon the ventilation of that colliery and upon the engine working properly, and according to the rules they state "as far as enginemen are concerned." I maintain that 12 hours is too long, and especially the 24 from Sunday morning until Monday morning in that engine-room———

28729. (*Mr. Ratcliffe Ellis.*) That is when the change takes place?—Yes, the change of shifts. Shall I just put it in this way. The course of working at present is this: a man starts on Monday morning from 7 to 5, and follows up that routine until Saturday: he works 7 to 2. Then on the Sunday, from 7 Sunday morning until 7 Monday morning, that is 24 hours on a shift. The men on the night shift then work from 5 until 7 the next morning, 14 hours on the Monday night, Tuesday night, and the following Saturday night he starts at 2 and works until 7 Sunday morning, when the man comes to change him. I say that those hours are much too long for any man to be in charge of those engines. I may emphasize my point by saying recently, owing to a man giving way to nature, falling asleep, the magistrates at Aberavon felt so strongly about the safety of the men, that they thought it advisable that the man should get a month's imprisonment. They saw the onus was so great, and the management, when they gave evidence before the Police Court, said the lives of those men in the colliery are dependent upon the safe working of the machinery on the surface. If that is so, I beg to point out surely 12 hours is too long for those men to be on duty. That is my point so far as the other classes of enginemen are concerned. The same would apply to boilers. The fact in some portion of the coal-field eight hours very nearly is general, shows that what we are putting forward is only a fair and reasonable point. Those employers feel that it is necessary that these men should work eight hours: hence they are employing the three men during the 24 hours' shift and during the week. I hope that the Commission will see that this matter is deserving of attention. That is my point with regard to those other enginemen.

Will you allow me to say, further, that so far as these men are concerned, even as to their own safety, it must be noticed that they are working 84 hours per week, and allowing them time to reach home to change, to have food, and to go back, these men have only, out of the 168 hours in a week, 63 hours as it were for rest, even if they go from work to bed and from bed to work.

28730. That is when they are on the night shift?—I am taking it now that they are working 12 hours, not 10 hours, by day, and 14 by night—that you divide that evenly: those hours, as you see, will take all their time.

28731. (*Mr. Ratcliffe Ellis.*) You have been an engineman yourself, I understand?—Yes.

28732. I suppose, speaking as an engineman, when you worked these hours you did not feel quite equal to your job at the end of your time?—That is what we feel.

28733. That is what your view was, speaking for yourself?—Yes.

28734. It has been said that these new engines, larger engines, put a greater strain upon the men: but there are mechanical contrivances which enable a man to control the engine much better than he used to be able to, are there not?—But the speed at which they are working at present brings the strain very much upon them. Collieries now very often are raising 1,500 tons or 1,600 tons of coal per day.

28735. There are, of course, more mechanical contrivances attaching to the engines than there used to be, which enable the engine-winder to have more control of an engine. But you think notwithstanding that, that the strain of these long shifts is too great upon a man?—That is my opinion.

Mr. THOMAS JONES called and examined.

28736. (*Mr. Cunynghame.*) You act on behalf of the South Wales Winding-Enginemen's Association?—Yes.

28737. What are you?—General Secretary.

28738. Have you been a winder in your time?—Yes.

28739. For how many years did you wind an engine?—20 years.

28740. You are, I think, in favour of some improvement in the sanitary condition of engine-houses?—Yes.

28741. What do you want done?—To have them thoroughly cleaned out, the walls whitewashed or painted, and do away with all filth that would be left to be accumulated inside the engine-house.

28742. What objects would be attained by that?—We are of opinion that it will be healthier for us as enginemen.

28743. You say that there should be a lavatory in engine-houses?—Yes.

28744. Do you mean a W.C.?—A W.C.

28745. You do not mean hand-washing things?—No.

28746. You want also exits and egresses in winding-engine houses?—Yes.

28747. Will you explain that, please?—Supposing, for instance, this room is an engine-room, there should be a door to come inside *there*, and *this* one is to go out by: that is what I should term an ingress and egress.

28748. You are in favour of eight hours for all winding-enginemen?—Yes.

28749. You heard the evidence which the last witness, Mr. Hopkins, gave?—Yes.

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28750. Have you anything to add to what he said? Do you wish to disagree with it, or to supplement it in any way?—I have nothing more to say than what he has just told you.

28751. That represents fully your view, does it?—Yes, practically.

28752. Then I think I need not ask you to repeat the evidence further than to say that you agree with it?—Quite so.

28753. You want, I think, adequate brakes on winding engines?—Yes.

28754. Is it the case that there are not adequate brakes at present?—From our point of view, what we define as being an adequate brake, is that in a single cage in a shaft, that is assuming that you were changing the rope, you would only have the weight of one cage then: that is what we say is a proper definition of an adequate brake—that it will hold that cage down in the shaft.

28755. There is a rule in the Act of Parliament for all Great Britain which says "There shall be attached to every machine worked by steam, water, or mechanical power, and used for lowering or raising persons, an adequate brake or brakes": and then it says "If the drum is not on the crank shaft, there shall be an adequate brake on the drum shaft." If that rule was carried out, would that satisfy you, or would not that be enough?—Yes—if that is a proper definition from our point of view of an adequate brake.

28756. It says that there shall be an adequate brake?—Yes; of course if that is a proper definition of it, and if it complies with our requirements, we are quite agreeable to it?

28757. You think, in fact, that some of the brakes used are not what ought to be called adequate brakes?—Quite so.

28758. But that would be rather a matter for carrying out the law that exists than a question of altering the law, would it not?—Quite so.

28759. Now you have something to say upon separators?—Yes.

28760. What are they for—separating the water from the steam?—No, separating all foreign matter so as to prevent it going inside into the engine: that is, supposing for instance some waste, or a wooden wedge, or an iron wedge, or a rubber has been left in the pipes after the surface craftsman has been doing a joint the previous day, or on any day so far as that goes, when they do that it is possible, through forgetfulness, that those things are left inside the pipe. Then, when the steam is turned on that matter is carried into the throttle valve, first of all: then it catches under the throttle valve and cannot pass through.

28761. What is the separator—a kind of sieve or gauze thing?—Yes.

28762. Might there not be a danger that the separator would get choked itself?—It is possible, but to meet that difficulty I say that they should be examined and cleaned.

28763. Are separators used on a number of engines at present?—Yes, they are used in some of them, I know: I could not say as to every one.

28764. Your Association represents that it would be better to have them on all?—Certainly.

28765. Now as to stop-valves: would you tell us what a stop valve is, and what you wish to be done with regard to it?—A stop valve is a valve which you can put down to prevent steam going into the engine through the steam pipes.

28766. But there must be a stop valve then to every engine, must there not?—On the steam pipes: we require that stop valves should be in the near reach of the engineman on duty.

28767. You mean that the stop valve should be within the reach of the engineman on duty: that is your point?—Yes.

28768. And in some cases that is not so?—Just so.

28769. (*Mr. Wm. Abraham.*) That is so in many cases, is it not—in the majority of cases?—Yes, in the majority.

28770. (*Mr. Cunynghame.*) It is not now, but it ought to be, in your view, in every case within reach of the engineman on duty?—Yes.

28771. What have you to say about indicators? First I will read to you Rule 30, which says: "A proper indicator (in addition to any mark on the rope) showing to the person who works the machine the position of the cage or tub in the shaft"?—Yes.

28772. I gather that you think that is not quite enough; you want something more than that?—Yes. We, as practical enginemen, cannot say exactly which is a proper one. Of course so many enginemen have grown up with their particular indicators, and from our point of view we cannot say which is the best. But wherever a dial indicator is upon any one engine, we should insist that the pin or hands should not over-lap.

28773. That is the particular point which you wish to emphasize with regard to indicators?—Yes.

28774. Then you say that speaking tubes should be aid from the banksman to the engine-house?—Yes.

28775. Do you mean from the banksman outside on the top?—At the pit-head.

28776. There should be a speaking-tube?—Yes.

28777. But in many cases he can speak and be heard without a tube, can he not?—Yes, in many cases, but not in all.

28778. Then you would mean, I suppose, that where he could not be heard—where the distance was too great—a speaking tube should be provided?—Quite so.

28779. Have you known of any accidents or inconveniences happening from the want of a speaking-tube, or has your Association known of any?—Not exactly of an accident to life and limb—you could not say that—but from our point of view there are many things going on at the pit-head which of course the enginemen know nothing of, and to make an engineman satisfied and to know what is going on down the shaft, naturally the banksman would tell him through the pipe; for instance, with regard to myself personally, the banksman would tell me perhaps "There is such and such a pipe with a long pull, and so and so, going down; now be careful in going through the collar-board," and so forth—I mean that by the speaking tube he could explain that to the engineman on duty.

28780. You mean that when any special weight, or anything of that kind, was being put on the cage, that he would have to guide his engine specially for, it would be convenient that he should have a speaking-tube?—Quite so.

28781. (*Mr. Wm. Abraham.*) What is the number of men in your Association who are working eight hours a day?—I have not gone into those figures.

28782. But approximately—is it the great majority of them?—Yes; I may say there are only about 50 of our men who are working 12 hours.

28783. Are you of opinion that so many of the employers already conceding the eight hours is a great argument in favour of their all being compelled to do it?—Yes.

28784. If I understand you rightly, you think it would be necessary to have some standard indicator—one indicator instead of the numbers of indicators that there are at present?—Yes, that is my point.

28785. You think it would be safer?—Yes; and every engineman would know then exactly what he had to contend with.

28786. That, in order to enable the engineman to know distinctly and exactly what he has to do, one standard indicator would be a great help?—Quite so.

28787. With regard to the speaking-tube I think, as you said, there are a great many things going on at the top of the colliery, there is a great deal of shouting going on, and consequently there is a danger of one man shouting something which you may take it is a communication with you, and that would lead to some danger?—That is so.

28788. Do you think the speaking-tube would be an improvement upon present conditions?—Yes, it would.

28789. And that improvement would increase the amount of safety?—Yes.

28790. Not so much because you can trace any direct accident happening, but it is more as a means of preventing the possibility of such a thing?—That is so.

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28791. (*Mr. Ratcliffe Ellis.*) With reference to the sanitary conditions of the engine-house, what is the filth which you say should be removed?—Take for instance, the oil and dust coming from the rope; that would be left sometimes to heap up under the drum. That, with water and steam possibly running against it, would cause it to smell sometimes.

28792. But whose duty is it now to remove that?—Of course that is an arrangement between the surface manager who gets some of his labourers, I suppose, to take it out.

28793. Yes, but who does it now as a matter of fact? Is it the engineman's duty to do it?—No.

28794. But who does it?—When you were working as an engineman who did it in your engine-house?—A labourer at the pit-head, or those who were working outside with the labourers.

28795. They are sent to clear this away?—Yes.

28796. And the engine-house is cleaned from time to time, is it not?—Yes—whitewashed.

28797. Is there any serious complaint about this matter?—No, not much, but I understand the Commission is to prevent accidents, and I thought it was well to mention it.

28798. You want to put all in?—Yes.

28799. There is no very serious complaint about it?—No.

28800. With regard to the exits which you have mentioned, do you advocate two exits or two doors, or what is it you want exactly in the engine-house?—Yes, I do advocate that.

28801. But why?—Mr. Hopkins did not go so far as I would go on that point. I would refer to the case of Clydach Vale; that occurred in 1900, and this pipe which he has just told you of burst opposite and prevented them going out through the door that was going into the engine-house.

28802. That is one case that you know of in which a man was prevented from getting in, or somebody was prevented getting out, because a pipe burst just opposite the door?—Yes.

28803. That is the only one, is it not?—Well, I thought if it was prevented there it would not happen again, and it would meet that danger.

28804. Do you think that is really a sufficiently clear source of danger to require that two doors should be put into an engine-house, one to go in by and one to come out by?—It would meet that which I have just stated to you.

28805. Yes, it would meet that particular case. Was this particular engine-house, which you are speaking of, on the ground floor?—Yes, on a level.

28806. Was there a window in the place?—Yes.

28807. Did the man get out of the window?—No.

28808. Why not?—He could not, unless he broke the window, of course, and that would be an iron frame. In that case the mechanical engineer was killed: he was scalded, and it caused his death.

28809. That is one case in which a man could not get out. Was he scalded because he could not get out?—Yes.

28810. The pipe burst opposite the door, did it not?—Yes.

28811. Why did he want to go out? Was he not safe in any part of the engine-house?—No.

28812. It was filled with steam?—Yes, and that is where the mechanical engineer was scalded to death.

28813. Have you any complaints to make about the construction of engines other than those you have already made?—No.

28814. Subject to the few suggestions which you have made, you have no complaint to make about the engines?—No.

28815. You have said you approve of the answers given by the last witness to the questions with reference to the eight hours?—Yes.

28816. And you approve of the answers that he gave to me? Is there anything you wish to add to that? I do not wish to go through all the story with you.—Quite so; then I agree with that.

28817. You agree with what he said in answer to me?—Yes.

28818. (*Mr. Smillie.*) With regard to the brakes, that is a very important question. The Act provides for what are called "adequate brakes"?—Yes.

28819. You are aware that practically the first General Rule of the Act provides for what is called adequate ventilation under ground?—Yes.

28820. And that there is a difference of opinion at the present time as to the meaning of "adequate" so far as ventilation is concerned?—Yes.

28821. It does not come before you as an engine-winder in the same way, perhaps, as it does to the miners, but you are aware that that exists?—Quite so.

28822. I think the same difference of opinion exists at the present time between the engine-winders and the management probably as to what "adequate" really means?—That is so.

28823. At many collieries, as has been pointed out by Mr. Rowarth, there is "hanging on" at mid shaft, it may be, at two or three different landings in the shaft?—Yes.

28824. Where there is or there may be in some cases double deck cages in which four tubs may be hung on at mid-shaft, that is a very considerable weight?—Yes.

28825. And it would require a very strong brake to hold the cage there unless the engine-winder himself was using the steam to hold it?—That is so.

28826. Is it your opinion that the brake power should be sufficiently strong, if applied, to hold the cage at any part of the shaft?—Yes.

28827. Is it possible to define that in clearer terms than by the word "adequate"?—Of course if one knew exactly what "adequate" was, it would meet that requirement, but our question in looking at it is whether that is clear. Of course we cannot make out what is the definition of the word "adequate."

28828. The Chairman to-day mentioned the fact that in Germany the Commission had seen certain engines and methods of working. I may mention that we have seen their brake power applied by steam which held the engine absolutely at any point that the engine-winder wished it to be held. Would that be called "adequate" brake power?"—Yes, if it held it.

28829. Speaking now as an engine-winder yourself, do you think there would be any real difficulty in applying to existing engines in this country adequate brake power that would hold the cages at any part where the engine-winder wished them to be held?—No, I do not see any difficulty: they could do that to make it hold. Of course the construction possibly might have to be altered in some cases.

28830 But it is not an insuperable difficulty?—No.

28831. It is a matter of a little expense?—Quite so,

28832. I suppose your opinion is that the expense of a few pounds, or even £100, should not stand between us and safety?—Quite so.

28833. Can you conceive of accidents arising through no fault of the engine-winder, but because of the want of adequate brake power where tubs are hung on at mid-shaft and the cage gives way?—No. I could not speak of any case now of an accident that would occur through inadequacy of the brake power.

28834. Is it not the case that at the present time, sometimes when tubs are hung at mid-shaft, the cage does really give way?—Yes.

28835. That must be for want of adequate brake power at the present time?—Well, I will just give you a case at Llwynypia, the Glamorgan Coal Company, where steam was cut off from the engine, and there were two men in the shaft; they were about the centre of the shaft, and steam was shut off from the boilers, and then, of course, that brake power was not enough, because steam was shut off, and down went the cage and an accident occurred. Now our suggestion is that a Whitmore brake would meet all that difficulty.

28836. Mr. Rowarth's position is that the brake should be strong enough to hold the cage at any part?—Yes.

28837. And that in addition to that, the steam power in the hands of the engine-winder should be an additional precaution to hold it?—Yes.

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Mr. T. Jones.
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28838. In the case which you have mentioned just now, had the steam not been cut off the engine-winder would have had his steam to hold the cage in position, but when his steam was cut off his brake power was not sufficient to hold it in position?—Quite so.

28839. And therefore an accident took place?—Yes.

28840. But I do not think you have quite caught my other point. It is this: in hanging on in mid-shaft—is that the Welsh term?—No—holding the cage, you may say, mid-way or in the middle of the shaft.

28841. I want to get to your terms: there are so many different terms for hanging on at pit-bottom, and so on; I mean hanging on at mid-shaft; two or four tubs, if it is a double-deck cage, may be hung on there. The existing brakes may not be strong enough, even when fully applied, to hold the cage there?—Quite so.

28842. The engine-winder, in addition to that, has to provide steam to hold his cage there?—Yes.

28843. If his steam were cut off at the boiler, as you mentioned just now, then his existing brake—his foot brake—could not hold it?—Quite so.

28844. What you really want is that by an adequate brake he should have the power to apply a brake to hold the cage in the shaft with any weight that is on the cage?—Yes.

28845. You cannot conceive accidents arising from want of that power, you say?—No, not at present.

28846. Can you not conceive that accidents could arise from that want of brake power?—It is possible that they could.

28847. It is possible that they could, but you do not know of any accident occurring through it?—I do not know of any accident occurring through that which you have just referred to.

28848. And generally you agree with the other witnesses as to the necessity for all safety appliances being provided?—That is my sole object—the safety of the men that go under my hands.

FORTY-SECOND DAY.

Thursday, 7th November, 1907.

PRESENT:

Lord MONKSWELL (*Chairman*).

WM. ABRAHAM, Esq., M.P. (Rhondda).	JOHN SCOTT HALDANE, Esq., F.R.S.
H. H. S. CUNYNGHAME, Esq., C.B.	ROBERT SMILLIE, Esq.
THOMAS RATCLIFFE ELLIS, Esq.	S. W. HARRIS, Esq. (*Secretary*).

Ironstone

Mr. JOSEPH TOYN, called and examined.

Mr. J. Toyn
7 Nov., 1907

28857. (*Chairman.*) I understand you are the Agent and President of the Cleveland Miners' and Quarrymen's Association?—Yes.

28858. You wish to-day to give us your views, not with regard to the coal mines in your district, but as to the ironstone mines, which are under the Coal Mines Regulation Act?—Yes. There are Special Rules for each district, of which I have a copy here.

28859. I understand that in the first place you desire to call attention to Rule 33?—Yes, that is as to deputies.

28860. Are your Special Rules the Cleveland code of Special Rules?—Yes.

28861. Special Rule No. 33 is headed: "Deputies:" "In the absence of the Overman and the Back-Overman, each deputy shall have the charge of the portion of the mine assigned to him. He shall, at the end of each day's work, ascertain that all men and boys are out of the district under his charge; but should it be necessary for any of them to remain he shall ascertain that they are left in charge of a responsible person: also that all unnecessary lights are extinguished, the main and tramway doors closed, and that the ventilation is going its proper course." That is the rule which you desire to call attention to?—Yes, more especially as to the appointment of deputies.

28862. What have you to say with regard to the appointment of deputies?—We say that there should be a practical examination in order to see that a man is competent to be a deputy.

28863. What sort of examination do you suggest?—That he should be examined as to his knowledge of the nature of roof, as to sounding, and as to whether there is any presence of gas.

28864. Who should conduct this examination?—That is the question. We would suggest that at each mine there should be two practical miners appointed by the men along with the manager and his under-manager.

28865. You would have four people to form a sort of committee to examine a man before he is permitted to act as deputy?—Yes—either four or any other number. We are not particular about that, only that there should be someone on each side, and that they should be able to test the man to see that he was fit to take the position.

28866. The principal expert knowledge that he would have to possess would be knowledge of ventilation: his particular duty is to look after the ventilation?—There is more knowledge required in regard to the nature of the roofs and timbering: so many accidents happen through roofs coming down.

28867. Exactly. But this Special Rule 33 apparently does not deal with timbering and the roofs and sides. You see this rule merely deals, apparently, with the supervision of ventilation by the deputy, and says nothing about timbering. Is there any rule to show how far the deputy is at present responsible for the timbering?—That rule points out also that in the absence of the overman the deputy is responsible for the district.

28868. He is in charge of the portion of the mine assigned to him?—Yes; and we think that before a deputy is taken to be competent to do that, he ought to show his fitness. Our point is that men are doing that kind of work and are appointed now who are not competent.

28869. Whom do you call the "back-overman"? Is he the deputy overman?—The back-overman, as he is called, is an official of the mine.

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28870. He is the next official to the overman ?—Yes.

28871. You have the manager, the under-manager or the overman, and perhaps sometimes the under-manager is called the "overman" ?—They are not included in that rule. They are very often called "deputies," and really they practically are, because in the absence of the overman they have charge of the district. But these men whom we want to deal with are really the working deputies who have the charge of the timbering.

28872. The back-overman is a mines' official, who probably has an under-manager's certificate ?—Yes.

28873. Do you know whether he must have an under-manager's certificate ?—Yes, I believe so.

28874. So that you say that a deputy should have qualifications of somewhat the same nature as the overman has at present ?—Of that nature—to show that he is a practical man.

28875. Have you anything to say with regard to the deputy's inspection of ventilation ? There is nothing in your statement about ventilation, but do you wish to say anything with regard to that ?—Only that he should have knowledge when gas is present. Of course it is the under-manager's business to get rid of the gas, but the deputy should be able to prove when gas is there.

28876. The number of accidents in the ironstone mines compares very unfavourably with the number of accidents in the coal mines in your own district, the Durham district ?—Yes.

28877. But the statistics of accidents appears to be even more unfavourable in the ironstone mines above ground than they are below ground. That, I suppose, you have nothing to do with ?—We do not complain about that here.

28878. In fact it is not your business, I suppose. You do not represent above-ground workers, do you ?—Yes, we represent the above-ground workers as well, but we are not speaking about them to-day.

28879. It is rather a remarkable thing that in the coal mines the above-ground accidents are just about a half a person in 1,000, and in the ironstone mines the above-ground accidents are very nearly two in 1,000 ?—Yes. It is a different character of work—heavier work.

28880. It is 0·66 in coal mines, and 1·940 in ironstone mines ?—Yes.

28881. How do you account for that ?—I think we have more inclines, and it is rather harder and more difficult work than the work is about the coal mines on the surface.

28882. At all events, you have no suggestion to make as regards work on the surface ?—No, it is more particularly with regard to the deputies that we wish to speak, and the underground work.

28883. You only propose to tell us about the underground accidents; but it is a very serious thing that there should be such an enormous difference—almost four times as many accidents among the persons employed above ground in the ironstone mines as there are among the persons employed in coal mines above ground in the same district ? Surely there must be somebody who can give us some suggestion as to how accidents above ground can be lessened ?—We have not taken that into consideration.

28884. (*Mr. Wm. Abraham.*) Will you kindly take it into consideration, and send someone to give evidence here who can speak about it. It seems so very strange that you should be here representing a body of men who have a less number of accidents than the men who are outside happen to have, and you are representing both in your union ?—You do not mean that we have a less number of accidents underground than we have outside, do you ?

28885. Yes ?—Oh dear, no.

28886. (*Chairman.*) As compared to coal mines ?—That may be.

28887. As compared to coal mines, the accidents below ground are more per cent. than the accidents above ground, but the accidents in ironstone mines above ground compare more unfavourably with the coal mines than the underground accidents do ?—And so do our underground accidents, do they not ?

28888. No, not to the same extent. There is about 50 per cent. difference in the ironstone mines compared with the coal mines below ground; and above ground there is something like 300 per cent. difference—one is three times or nearly four times as much as the other in the case of accidents above ground ?—I know I am not here to ask questions, but may I ask whether you include the quarries in that ?

28889. No, only the mines under the Coal Mines Regulation Act. It is a marvellous state of things ?—I can only say this, that the work is heavy work, and we have a number of inclines where they run the stone down in large sets at once, and at the coal pits I take it in a great many of them they just pull the kerb up and tip it, and there is no incline or anything. Now we have lots of inclines, and it is far heavier work than the work is about the coal pit.

28890. Do you mean above ground ?—Yes, above ground.

28891. That is the explanation which you give. But you are not commissioned to say anything to us on behalf of the men with respect to these above-ground accidents ?—That is so.

28892. (*Mr. Wm. Abraham.*) We had better ask you to send someone ?—I do not think we could give you this information. At a mine like Eston, where there are three inclines and one very steep one, they will very likely employ men who are what we call "greenhorns" to work about those inclines, and we think that that is to a great extent how these accidents happen.

28893. (*Chairman.*) Well, that is a reason; someone can speak to us about these "greenhorns," as you call them ?—I should not like to say anything definite about it, because we have not prepared ourselves with regard to what goes on outside.

28894. But still, that is a very important matter. You see there are two kinds of mines in the same district, namely, coal mines and ironstone mines, both of which are under the Coal Mines Regulation Act, and in one class the accidents on the surface, in proportion to the men employed, are nearly four times as much as in the other ?—I have been in the Cleveland district for many years, more than 50 years, and I could not suggest to you any safer means outside.

28895. (*Mr. Wm. Abraham.*) If you will allow me to say so, I think we had better drop this subject now and ask the Chairman to be kind enough to allow you to come again to give evidence on this special question ?—If it is necessary we can do so; we can make inquiry, if you put it in that way.

28896. You see it is a question upon which we want men to speak specifically and definitely, or else it is of no use ?—If you wish it we will appoint someone to give evidence before you.

28897. (*Chairman.*) By all means. You have made one suggestion, that it is owing to the employment of persons who are not very well skilled ?—That is a sort of haphazard statement. I have an idea that a good deal of that is done.

28898. (*Mr. Wm. Abraham.*) Yes, we have an idea about it, but we want someone to come here to speak to it specifically ?—If you wish it, it shall be done.

28899. (*Chairman.*) We should like to hear the evidence of someone who knows all about it. You see with regard to falls of roof and sides the accidents are very heavy ?—Yes.

28900. The figures as to fatal accidents in the Cleveland mines are these: out of 15 fatal accidents underground, 11 were due to falls of roof and sides ?—Yes.

28901. It is a very large proportion—a larger proportion than in the case of the coal mines. So that it is very clear that it is a matter which requires a great deal of consideration. Then you say that the treacherous nature of the roofs and the heavy timber required to secure them, make it imperative that for the safety of the deputies themselves and of the miners under their charge, two skilled deputies should be allowed to go together ?—Yes.

28902. You say that a deputy should never go by himself, but that they should be allowed to go together. Do you mean that if a deputy thinks it is desirable that he should have another deputy to go with him, he should be always permitted to take another deputy ?—Scarcely that. They have to go two together. In one mine they have to go three together, where it is very high and there is very heavy timber; but in all the mines it requires two to put baulks in.

28903. That is so now ?—That is so now.

28904. Then you are not making a new suggestion when you say that two deputies should be allowed to go together ?—Two skilled men. May I say that in some

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of the mines that is the practice now—that two skilled men go together. They generally take the best miners for the deputies, and two skilled men go together. Then we have a number of mines where there is a skilled man, and they put an unskilled man with him.

28905. That is what you object to?—That is what we object to.

28906. I suppose you would say that if it was necessary to teach men their duty as to timbering, the third man, who is a learner, should go with the other two skilled men. How would you propose to teach a man to timber?—There is never much difficulty in the other mines where the old practice is carried out: they take the best miner, and he goes away with the deputy at once, and he only has to learn the cutting of the timber, because he knows about the nature of the roof, and all that sort of thing. He is very soon trained.

28907. Then your proposal is that there should be some Special Rule applying to ironstone mines, to the effect that two skilled men should always go together?—Yes.

28908. At present that is the case in a great many mines?—At present that is the case in a number of mines, and in a number of others, perhaps five or six, there is a system which has crept in during these recent years of putting an unskilled man with a skilled man.

28909. Of late years?—Yes, it has crept up these late years.

28910. Would you say that that ought to apply to every ironstone mine in your district?—Yes. We do not want to single out any particular mine, if you will allow me to say so, but we speak in a general sense—I mean we do not want to "spot" anybody.

28911. No, but possibly there may be some mines where the roofs are not of such a treacherous nature as they are in others?—That is so.

28912. Where it may not be necessary always to have two skilled men going about together?—Then if the men have to put timber in—to put baulks in—they should be allowed to go two skilled men together. If there are two skilled deputies together, the one assists the other, and there are two pairs of eyes to see the danger in the place and to look after the men, and to look after each other. Now if you take one of the skilled men away and put a man with him who is not responsible and who is unskilled, then there is one pair of eyes in the place, and he not only has to look after the miners but he has also to look after his mate, and he has only one pair of eyes and one brain to do what two pairs of eyes and two brains should do.

28913. What you say would apply to all coal mines as well as ironstone mines?—I think perhaps two ought to go together in those cases, but I may say that our district is an exceptional one in the whole of the United Kingdom; I have not known one like it.

28914. You go on to say that no men should be permitted to set or put in timber who have no practical knowledge of timbering. How far would you carry that; do you suggest that in every case the ironstone getter should be a distinct man from the man who puts up the timber? An ironstone getter, I suppose, might know enough of timbering to put up his own timber, to a certain extent?—Some of them are competent to do it.

28915. How would you arrange that?—It is the incompetent men that we complain about.

28916. How would you decide as to who is competent and who is incompetent?—I think you will see that further on in the statement we suggest that no man should be allowed to be a deputy unless he has had three years' experience in getting stone.

28917. I am not speaking about deputies, but about the ironstone getter who is not a deputy?—Yes.

28918. Supposing he is there and sees that a certain amount of timber is required, and required very quickly, so that perhaps it would be difficult for him to get a deputy to set the timber in time, might he not be allowed to set, it himself?—No. If he knocks a prop out with a shot or anything of that sort, he can set it up, but he ought not to put any baulks of timber in.

28919. However skilled the man is? He might be just as skilled as the deputy who generally puts in the timber?—Yes, but it is not in his calling, and he has not the tools there to do it with, and he does not do that.

28920. That is not the practice?—No. If the timber has been set and he accidentally knocks it out with his shot, he must either set it or go for the deputy; but with regard to putting in new timber, he has nothing to do with that at all.

28921. Is it contrary to the Special Rule that he should be allowed to set up new timber, or is it the practice that he should not do that?—I do not think there is a Special Rule about it. In some districts of the coal mines I think some of the men do their own timbering, but in the ironstone mines there are special deputies told off to do that kind of work.

28922. So that it would be a perfectly wrong thing for an ironstone getter, however competent he might be, to set up his own timber?—It would be, except in putting punch props in, if he is cutting out a piece of stone, or if a piece of stone is overhanging. In such cases as that a deputy would provide him with suitable lengths to put that timber in, but it is not his business to do the timbering, and he is not allowed to do it.

28923. You go on to say that none but practical men should be allowed to examine places that miners have to work in before they commence their shift's work. I imagine that that would always be so. Did you ever know an unpractical man who was allowed to examine these places?—I do not know that we could point out any particular case; but we think it ought to be provided so as to make it imperative that no man should do it.

28924. Would you have some sort of Special Rule to provide for that? It is the duty of the deputy to examine these places, and I suppose the deputy, whether he has passed an examination or not, is generally a practical man; you say that as a general rule the best miners are made deputies?—Yes, under the old system, but not under this new one.

28925. It is not the case under this new system?—No; that is what we are complaining about.

28926. You complain that inferior men are being made deputies?—We complain that men who have not had a practical knowledge of getting stone on the face are put on under the new scheme. One practical man has sometimes four or five others under his charge; I can give you a case where a man had four or five under his charge, and he went round to examine in the morning, and he told off two of the men to go into one district to timber, and two in another, and then he took the remaining man with him; during the day two fillers found the top was not very good, and they went to one of the deputies to get him to come and examine the top, and that assistant-deputy said that the top was all right; then before the day was out both men were injured.

28927. You complain that although matters were fairly satisfactory some time ago, recently a practice has crept in of making deputies of men who have not had sufficient experience?—That is so, with the exception of about one or two mines. I believe this practice has prevailed in one mine, or two mines, with a low seam where the tops are not very bad, for a number of years. But in recent years other mines, where the tops are not very good, have adopted the same principle, and we complain about it. Then there is another thing: there should be a deputy in charge of the men as long as the men are in. That Rule which you have read out says that they must see all the men out, the lights out, and that sort of thing. Now only last Saturday I attended an inquest where the deputy left at 20 minutes past 12; he left his assistant in charge from 20 minutes past 12 till the men went out; that assistant was not competent to examine in the morning, and he had not done so, but it seems that he was competent to take charge of the men after the other man had left. We say that there ought to have been a competent man left there in charge of that mine until the men went out, and that is why we want to keep there all practical deputies that are setting timber.

28928. The Special Rule says "Should it be necessary for any of them to remain he shall ascertain that they are left in charge of a responsible person?"—Yes.

28929. That is to say, that there must be some responsible person, according to your Special Rule 33, while the men are in the mine, to look after them?—Yes. We say an assistant-deputy is not a responsible person.

28930. Well, he may or may not be, I suppose?—That is what is done.

28931. I suppose there are some assistant-deputies who know their duties perfectly well, and as well as the deputies themselves?

28932. (*Mr. Wm. Abraham.*) What was the object of the coroner's inquiry in that case?—The coroners do not understand it.

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28933. (*Chairman.*) What was the verdict?—The verdict was "accidental death." It was not the fault of the deputies with regard to the accident at all. I am not speaking about that, but out of the enquiry there appeared the fact that when the deputy was put in he examined in the morning himself. I asked him the question myself: "Is your assistant competent to examine?" He said, "No"; and I said, "Then it appears he is competent to take charge of the men after you leave, but he is not competent to examine."

28934. (*Mr. Wm. Abraham.*) Was there a Mines Inspector at this enquiry?—Yes.

28935. Did he point out that there had been any breach of any rule?—No, I do not think he did.

28936. (*Chairman.*) But surely it was the fault of the deputy, if he did not leave a responsible person in charge when he went away himself. The rule says that he is to leave a responsible person in charge. I suppose he might say that the man he left was a responsible person, even although he was not capable of examining, because the examination had already taken place. I suppose that what you mean by a responsible person is that you ought to have a man who is capable of examining?—Yes, he ought to be capable of examining at any moment during the shift, because in our mines sometimes it will be all right at one moment, but an hour afterwards the top becomes bad; we say that every moment during the shift when the men are in there should be a competent man there.

28937. But it certainly appears to me that "a responsible person" ought to be held to mean a person who is equal to the duties which he is called upon to perform?—Yes.

28938. And in that case it was clear, from what you said, if you are correct in your statement, that the deputy did not appoint a responsible person to look after the men after he went away?—I expect it would be the manager who would arrange the business, and he had this assistant, and I asked the assistant myself "What happens: do you put timber up?" He said, "Sometimes I put up a prop," but if there was a baulk wanted he had to go away into another district to seek a deputy. There was not one in his district, and he had to go away to another.

28939. Then you think it was not the fault of the deputy, but that it was the fault of the management for giving the deputy an assistant who was not a responsible person?—Yes, it is the management that is at fault for allowing such a system to go on.

28940. It does not seem to me that Rule 33 fails to meet that, because it does appear to meet the case; but in my opinion, if what you say is correct, the rule was not properly enforced—the management broke the rule themselves by not giving the deputy a responsible assistant?—There is no doubt that is so.

28941. Is there anything else you would like to say about Rule 33?—I would only like to say this, that you have it stated in your report that a large number of accidents happen from falls of roof. The Cleveland district is to a very large extent pillar working, that is to say, it has been worked once through, and they are now working out what you might call the supports or the pillars. Of course it causes sometimes what we call a creep. I do not know whether you understand that: it puts weight on, and it will burst pieces off the side, and it makes the top give way. We think that there is now more need for practical men putting in timber than ever there was.

28942. You also say that the management, according to your account, are getting more lax in regard to the men they employ?—Yes, they are. Of course it is a question which I could not introduce here properly, but, if you will allow me to say so, it is simply in order to work on the cheap—to tell you straight.

28943. What is the state of things with regard to the accidents during the last few years?—They are rather less than they used to be.

28944. How do you acount for that, if the management is more lax?—I do not think the management is more lax, only they are trying to do it cheaper. There are some mine owners in Cleveland who have asked me myself about it, and they have said that if I can suggest any means they would adopt it, but that is where they have an equal responsibility with the deputies.

28945. I do not quite follow you, because you began by saying that the management was getting more and more lax, and that they were less particular as to the men they employed in responsible situations, and at the same time the mines were getting more dangerous to work; but you now tell me that the number of accidents has grown less in the last few years?—The mine owners are not lax except in this particular point, so far as I know. I do not think they would do anything to cause an accident to a man; but in later years the men have become more accustomed to deal with the matter. We adopt the principle laid down by the Act, which we have a right to do, of sending two men round every month to examine, and those men do go round to examine.

28946. It is only lately that you have done that?—We have been doing it for some time, but there is more of it done now. I may tell you that we advise the men to do all they can, and they do all they can to prevent accidents. I think both the management and the men themselves have helped, perhaps, to minimise accidents.

28947. You say that the diminution in the number of accidents is to some extent, at all events, caused by the periodical examination by the men which takes place now more often than it used to?—I think so; and the mines are better ventilated than they used to be in earlier times. I have known when there have been 26 fatal accidents in our district in a year: that was in the old times when there was not such good ventilation, and men were less capable, probably, than they are now.

28948. But then the ventilation would not affect the falls of the roof and sides?—It would prevent the men from seeing the danger. The better the ventilation is, the more they have a chance to see whether the top is giving away, because there is a large amount of powder used in our district—probably 1,100 or 1,200 tons in a year. It takes about half a pound of powder to a ton of stone, I should think.

28949. Sometimes there would be clouds of dust, and so on, from the explosion of the powder, which would obscure the view and tend to make it more difficult to prop up the roof and sides?—Yes. I have seen the ventilation so bad when I was getting stone myself, that, after we fired the first shot in the morning, we could never see one another during the day. But it is nothing like so bad now.

28950. You go on to deal with Rule 65 with regard to drilling machines, and you say that young and inexperienced men should not be permitted to take charge of a machine or be entrusted to fire shots unless they have had at least three years' experience in getting stone in the face?—Yes.

28951. Have you anything to complain of with regard to that?—There have been men appointed to these machines who never did any mining, and a man who does the charging after the machines, has to examine a place after the shots are fired, before the fillers are allowed to go in, and if he is not a competent man he would not know whether the top was safe or not.

28952. I see that there is nothing about incompetency in Rule 65. It says, "Where drilling machines are used each chargeman shall before commencing work in any place, and each shot-firer after firing a shot, shall examine the face, sides, and top," and so on. I suppose it is understood that a chargeman should be a man who is competent to discharge his duties?—Yes.

28953. (*Mr. Ratcliffe Ellis.*) Who is the chargeman?—He charges the shots after these power machines.

28954. (*Chairman.*) He is trusted to fire the shots—Yes. If I might explain to you, a power machine will go into a place and perhaps drill 8 or 10 holes before it comes out, and then a man to charge the shots follows in, and he fires them all. After he has done that he has got to examine the roof and sides to see that it is safe before the unskilled men, the fillers, come in, and therefore we think he should be a thoroughly competent man.

28955. Would the deputy do that, as a rule?—No, the chargeman would do that. The deputy examines the place in the morning.

28956. The chargeman has not necessarily had the experience of a deputy?—No. Of course he has to have some practice before he is allowed to fire his shots.

28957. You say that there ought to be some stringent rules and regulations applying to chargemen, and that nobody ought to be allowed to exercise the duties of chargeman unless he has had a certain amount of experience?—Yes.

28958. That is not so now. Inexperienced men are employed, you say?—Well, it is only now and again that one hears of men who are not competent.

28959. Have you ever complained to a Mines Inspector that inexperienced men are employed as chargemen?—We do not like to do so very much.

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28960. What are you afraid of?—Well, when we have complained to them they never make much out of it.

28961. (*Dr. Haldane.*) The danger you refer to is from falls of roof after the shot?—Yes—to see that the place is all right before the fillers go in. The reason why we have put this down in the statement is that we have known cases where young men have come in and taken charge of a machine. Of course the chargeman drills the holes, but he has never had any practical work in mining at all, but he has to have a youth or a young man with him to change the drills, and of course he has charge of the drill, and the place, and that young man's life while he is doing that work. Therefore, we think he should be someone who understands the nature of the roof before he is allowed to go and drill—for his own sake and for the sake of the young man who is with him.

28962. (*Chairman.*) But do not the managers of these mines consider that that is a reasonable proposition on your part?—They do not pay any regard to us—they set on all they like.

28963. But you say it is only in exceptional cases that you have known such things happen?—I grant you it is exceptional, but we want to make it so that they cannot do it.

28964. You would like to have a Rule to the effect that a man should have a certain amount of experience before he is made a chargeman?—Yes, especially the chargeman, more than the driller, because the chargeman has to fire the shots, and he must know that the place is safe and pass it as safe before the unskilled filler comes in.

28965. A filler need not be skilled in general mining?—No: he knows nothing about it: he just goes and breaks up the stone and fills it.

28966. There is no reason why he should be skilled in general mining, is there: an inexperienced man who knew nothing about mining might be a very proper person as filler if he had a proper person appointed as chargeman over him?—Well, the more skilled they are the better, but unfortunately this class of men who come in as fillers are quite inexperienced. Sometimes I have known them to be men who come in off the road, and they have been given money to get candles with, and then they come the next day, and perhaps such a man would not know how to see to that.

28967. No, it is the duty of the chargeman to see to it?—Yes.

28968. Then you deal with the question of the inspection of mines, and you complain that Mines Inspectors have too extensive an area to cover, and cannot possibly visit and inspect the mines in their respective districts as they ought to do. I should like to hear your views as to that?—I should say in the first place that we do not complain about the work the inspectors are doing, but we are absolutely certain that they cannot possibly inspect the mines as they ought to be inspected: they have too much work to do. Of course our own district is connected with South Durham for inspection. In our own district, with the exception of one mine up in Weardale, which is under the Metalliferous Mines Act, there are 20 mines and 16 quarries that we cover, and that is only a portion. Now when the Mines Inspectors go to a mine, it is not enough that they should go just into two or three places and see them. We say that all the air-courses and every working place ought to be thoroughly inspected by an inspector once at least in six months. As a rule now, the inspectors cannot do it. I believe they work very hard, but we find that most of the inspectors will go, after an accident, to see the place.

28969. How would you propose to deal with that?—would you propose more inspectors and more assistant inspectors than there are at present?—Yes.

28970. Or would you have a third class of inspector, who perhaps had been a working miner, and who would be very much in the position of a deputy?—That would be the best policy.

28971. Do you suggest that somebody like a deputy should be appointed?—Yes—a thoroughly practical man.

28972. That a thoroughly practical man should be appointed mine inspector?—Yes, because the inspectors now, with all due deference to them, only have the theoretical part of it, most of them. Of course they have been mine managers, I daresay, but they have not the practical knowledge.

28973. How many of this class of inspectors do you think it would be desirable to have? I suppose they would not be men who would expect to become in the course of time assistant inspectors or inspectors; they would probably be a class by themselves who would always remain in a third division of inspectors?—I have not thought about that point, but if they could work themselves up and pass so as to get up higher, I would allow them to do so.

28974. What would you consider should be the remuneration of those people: should it be something like £150 a year, £3 a week?—Yes, there could be good men got to do it for that.

28975. How many would you suggest?—I think there is plenty of work for one in our own district.

28976. Then I suppose you have two assistant inspectors in your district?—There is a chief inspector and there are two assistant inspectors, and they have to cover Cleveland, South Durham and a part of Westmoreland, I believe—all the mines and quarries.

28977. That is to say, you have three?—Yes. They cannot possibly do it.

28978. You think that one working-man inspector would be sufficient help?—In our district: I think he ought to be set down in Cleveland, and there is abundance of work for him there.

28979. Do you mean for iron-stone mines alone?—Yes.

28980. You would have a working-man whose duty it would be solely to inspect the iron stone mines, not the coal mines at all?—Yes.

28981. You suggest that his duties should be confined to Cleveland, Whitby and the Rosedale Abbey districts. Does that comprise all the ironstone mines of the district?—I think I have very nearly covered them.

28982. You think that one working-man inspector would be enough to cover all the ironstone mines in your district?—It would be as much as he could ever possibly do; I am not quite sure that he could do it, but I thought I had better not put it too little.

28983. At all events, you think a beginning might be made by appointing one man?—Yes.

28984. (*Mr. Wm. Abraham.*) The great danger in your district is because it is an ironstone district, which is quite different to a coal-mining district? Altogether different.

28985. The danger arises from the fact that you have to use so much powder, about ½ lb. to every ton of stone, I think you said?—I should think it is nearly that amount.

28986. And that is in itself a great source of danger?—There is no doubt about that. You see with such heavy shots being fired with, say, 2 lbs. of powder in, it is bound to shake the roof.

28987. So that your danger is not a danger arising from gas at all?—Not so much.

28988. But it arises from the fact that so much powder is used that it shakes the roof and sides, and that they are frequently giving way; that is the great source of accidents in your district?—Yes. We have gas, and men have lost their lives from inflammable gas; but that is not our most dangerous point; we are not complaining much about that.

28989. In the first instance, in the opening-out of these mines, it is dangerous work?—Yes.

28990. But you say that in your district now you are chiefly working pillars which were left behind in mines that had been worked before?—Yes.

28991. As a practical man, does that in your opinion vastly increase the danger?—We think so.

28992. We want to understand now the chief reason of the dangerous conditions of working; that being so, if I understood you rightly, your great complaint is that there are managers who allow incompetent men to be appointed to the most responsible position in that dangerous district; that is the burthen of your complaint?—What we say is that they are not all responsible deputies. They have assistants; some of the assistants may be practical men; some of them may be old men, but some of them are young men, and they are not practical men.

28993. But you are not charging the whole body of employers in the district with what I should call this disgraceful state of things?—No.

28994. Still, you know within your own knowledge that there are a number who allow incompetent men to be appointed to these responsible positions, and you wish to make that impossible?—They do not call them responsible, but they are put there, and they are put under another man.

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28995. (*Chairman.*) I understood you to say that sometimes the deputies themselves were not competent?—Well, they are not.

28996. And still less the assistant deputies?—Yes.

28997. (*Mr. Wm. Abraham.*) Is General Rule 39 of the Mines Act put in force in your district at all?—We have not much fault to find with respect to that. We are only told that one man is not allowed to get stone in the face; but then they can put two unskilled men, and two can do so.

28998. Let us deal with that; is that so really?—We have no fault to find about that.

28999. It is not a question of your finding fault; you are here now. The point which you have made is a point which may appeal to some of us who have practical knowledge like yourself?—I think as a rule our managers are careful not to commit a breach of that rule. As a rule the managers in Cleveland do not commit a breach of that rule.

29000. But why did you say just now that they consider they are not committing a breach of the rule if they put in two unpractical men?—That has been a decision which has been given; that is all I mean. You know it yourselves, I think.

29001. But we are speaking now about what is the practice in your district?—The practice in our district is, I think, to keep the rule, so far as I know.

29002. Then you have no complaint to make?—Not on that point.

29003. (*Chairman.*) I am told there is no such decision, as you suggest, that the rule allows two unskilled men to work together?—I believe that has been decided, but we have no trouble with that, and I do not think our managers commit a breach of that rule at all by putting a man in by himself. I have never heard of it. As a rule, the rule is carried out.

29004. (*Mr. Wm. Abraham.*) Then what is the nature of your complaint in regard to their allowing unpractical miners to become fillers?—We cannot prevent them.

29005. It is not a question of preventing it; you want to remedy this condition of things?—They are not working in the face; they are only breaking up the stone that has been got.

29006. (*Chairman.*) I understand you do not object to inexperienced men being brought in as fillers so long as they understand the drill?—We do not object to them at all. It is not a question of drilling; all they have to do is to break up the stone and fill it; they do not work in the face.

29007. (*Mr. Wm. Abraham.*) Will you try and understand the question which I put to you; these men are allowed to fill in places where the stone has been brought down by the force of powder?—Yes.

29008. Is that always safe?—It is within the scope of the Mines Act; it is perfectly in order.

29009. Then you do not want to amend that at all?—We do not want to complain about that at all. We have no complaint upon that.

29010. But I thought you said just now that these men, being strangers to the mine, are placed to fill stone where, by their own knowledge, they could not so examine the place as to be able to inform themselves whether it was safe or not?—No, they could not.

29011. That is so?—That is so. But the chargeman has to look after them; it is in the Special Rule; the chargeman has to see that the place is safe for them. There is no fault on that head at all. I do not think we have had more than two fillers killed in the whole history of our Cleveland mines. We have no fault to find upon that point at all.

29012. I am glad to hear that. I thought you had a complaint to make?—No, we have not.

29013. Then your complaint chiefly is against incompetent men being placed in responsible positions as deputies and so forth?—Yes.

29014. Then let us deal with that. To what extent has that been done?—I should think at the present time there would be probably about six or seven mines in the Cleveland district where that has been carried out—seven, perhaps.

29015. (*Mr. Smillie.*) Out of 20?—Out of 20.

29016. (*Mr. Wm. Abraham.*) That is to say one-third?—Yes.

29017. Now what is the present means of examining these men for the appointments?—The under-manager, if he wants a deputy, just goes to a certain man and says: "I want you to start deputy work," and the man goes and starts. There is no examination at all.

29018. Naturally the manager would select the most competent man that he had, would he not?—He probably might.

29019. Your complaint is that he does not—we may as well have it, you know?—No, it is not so much that as the system. To try and make you understand, I will put it in this way: I will suppose that you are a practical deputy, and that you have another practical deputy with you.

(*Chairman.*) I understood the Witness to say that the best men were not appointed as deputies, certainly.

29020. (*Mr. Wm. Abraham.*) That is what I understood you to say when you answered my question: the burthen of your complaint is that unpractical men are being appointed in some places to the most responsible positions in the practical working of a mine?—As assistants.

29021. (*Chairman.*) No, I understood you to say as deputies as well as assistants?—I am not complaining so much about the deputy who is responsible, as his having an irresponsible man put with him when there ought to be two responsible men together.

29022. You, yourself, say it is necessary to have this examination for deputies because you consider that the deputies are not up to the mark?—Some of them are not.

29023. (*Mr. Wm. Abraham.*) That is the point. We do not believe that you charge the whole district, but there is occasionally a case of the kind, and you have said that it is so for one-third of the district?—I think I can put it to you clearly in this way: there are certain mines in the district where the principle is to select the best miners for the deputies, and they put two of those selected men together, and they are both responsible—one is as good as the other: they are both competent to go and inspect in the morning, and they are competent to do any part of the work. Now in six or eight of the other mines, instead of having those two competent men together, they have one competent man and another assistant with him who ought to be a man equal to himself. I cannot put it any clearer.

29024. (*Chairman.*) Then it seems to me that I misunderstood your evidence to some extent, because I certainly understood you to say that it was necessary to have this examination for deputies, inasmuch as some mine managers did not appoint the best men they could get as deputies, and that some deputies were certainly not up to the mark: and that was the reason why you insisted upon having an examination of deputies?—That is so to a certain extent: there are some men who have been appointed deputies who have never been miners.

29025. (*Mr. Wm. Abraham.*) That is what we want to get from you if you had only stuck to one story. We do not think for a moment that you are charging the whole district with this practice, but that you have known of some cases where they allow incompetent men to be appointed to a most responsible and practical position in the mine?—We have some that have not had the knowledge which we think they ought to have had before they were appointed.

29026. Very well, you have some. I do not believe that every district would allow that state of things to exist, but as you know, all that legislation can do is to bring up the unpractical and indifferent employers to the level of what the best practical employer does without the legislation?—Yes.

29027. That is the burthen of your complaint now, that there are men in the mines who are guilty of making appointments, as you have reason to believe, of men who are not practical?—Yes. May I give you an illustration?

29028. I think if you will leave it there it will be sufficient?—I would rather give you an illustration: here is a mine with 50 deputies in it: who are all practical men: now it suits the manager's purpose to take 20 of those practical men away and to put 20 men as assistants there who are not practical men. I want to ask you, if you will allow me to do so, is the efficiency of those deputies the same as it was when they had 50 competent men? That is the real kernel of the thing.

29029. (*Chairman.*) Still, what you say is rather a puzzle to me, because you distinctly said to begin with, as I understood you, that there were certain men in the

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position of deputies who were not the best men that could be got and who had not got the practical experience. Now you say that a certain number of the deputies are withdrawn and that assistant-deputies are put in their places, and you have no complaint whatever to make, as I understand, with regard to the men who are nominally the deputies, but the complaint you have to make is that certain assistant-deputies are put in the place of the deputies to perform their duties?—That is the chief complaint. There is a little complaint about men being appointed who are not competent, but not so much that as with regard to assistants to the deputies being appointed who are not competent.

29030. Then you would insist, I suppose, upon anyone who exercised a function of deputy at all, whether as assistant-deputy or as deputy, passing this examination?—Yes, that is it.

29031. (*Mr. Wm. Abraham.*) Have you known cases where deputies have been appointed who have had less experience than three years?—Yes, certainly: some have never had any experience at all in getting ironstone.

29032. Then we will come back to that: there is a case against the deputies as well as against the assistant-deputies?—We do not want to bring that up.

29033. But I want to know the truth: we are sitting here to investigate the truth, and we expect to have it from a man in your position?—We have known men who have never got any ironstone being appointed deputies.

29034. Very well, there you are, if you can prove that?—We can.

29035. Do you know of cases where unpractical men have been allowed to put up timber in dangerous places?—I could not say that I have known such cases. Of course, these assistants have gone to put it up.

29036. Well, the assistant is a man after all?—He is a man, but he is not a competent man.

29037. That is the point; I am trying to help you all I can. So that these incompetent men are allowed to go to dangerous places to do things which nobody but competent men ought to do?—They are supposed to be under the superintendence of the one man.

29038. But they are allowed to go by themselves?—They are. Might I correct that: two of them go—not single-handed. Where they have to put baulks in it takes two of them, and two assistants have gone to timber a district.

29039. Are the two who go together incompetent?—Yes.

29040. (*Chairman.*) Both of them are incompetent?—Well, they are assistants.

(*Mr. Wm. Abraham.*) But they are incompetent men, whatever their position is.

29041. (*Chairman.*) One of them is an incompetent man and the other is a competent man, perhaps?—I would not like to say that with regard to all of them. I must say that there are some old miners who have been put on to that kind of work, and I could not say that they are incompetent.

29042. We do not suggest that you should say that everyone is incompetent?—I could not say that that class of man is incompetent, but I mean to say a greenhorn who has been taken on to fill and then does the other kind of work, would be incompetent.

29043. (*Mr. Wm. Abraham.*) You say in your statement that two skilled deputies should be allowed to go together?—Yes.

29044. And that no men should be permitted to set or put in timber who have no practical knowledge of timbering?—Yes.

29045. I ask you whether that is so—no matter how infrequently it happens, but does it happen?—It does.

29046. Very well, that is all that we want. Now you want to have some Rule made, either Special or General, to prevent that being allowed?—Yes, we want some Rule to say that they shall be all competent and thoroughly practical men.

29047. Therefore, the burthen of your complaint is that unpractical and incompetent men are being placed in responsible positions at some places?—Well, I had better put it "irresponsible men."

29048. (*Mr. Cunynghame.*) With regard to one question which you have been asked, would you give us the name of the mine where the incompetent men are being put on?

We do not wish to single out any particular mine.

29049. Then, of course, it leaves it open to this. I sympathise with you entirely in regard to your not wishing to give the name, and I do not want to press you to give it, only, of course, if you say that somewhere there is somebody who is incompetent, but you will not say where, it cuts away all chance from the man of coming and saying, "I am competent," and of proving it. You do not give him a chance, as it were?—No.

29050. Therefore, of course, as you are aware, it must very much weaken the value of what you say, must it not?—Yes.

(*Mr. Cunynghame.*) I am not at all wishing to put it against you; I respect your motives. I will say no more—indeed, I do not think I can say any more upon that.

29051. (*Mr. Wm. Abraham.*) But let me ask you, as I did a witness yesterday, whether you will give that information privately to the Chairman?—Will you allow me to say this: take a man who is not competent to examine in the morning, and then suppose he is put to set timber up, do you consider he is a competent man?

29052. We do not want to go back to that. I understand that you have cases in your mind; all we ask now is whether you will give that information privately?—I can tell you that there are about seven or eight mines in the Cleveland district where there are assistants put under a deputy who are not responsible.

29053. I should like you to give the names to the Chairman—not to go down in print—because that would be of great assistance?—Well, if you do not see clearly the point that we put I do not think I can make it clear.

29054. We see the point that you are putting?—We will give you privately the names of six or seven mines where this business is carried on. I must draw a comparison again: there are four of you gentlemen sitting on that side of the table; now suppose that you are all practical and responsible men, then take three of you away and put three irresponsible men who are not competent to examine in the morning with you, and suppose that the other gentleman has charge of you three; he sends you to put up timber and he is supposed to inspect it, and he may get there probably some time in the day, but sometimes he may never go there at all, but may leave you to put it in. I put that gentleman as being responsible and that you are his three assistants, and he says to two of you, "Go and timber a district," and then you go to timber that district, and he takes the other assistant with him to go and timber another district, and he is not with you while you are putting that timber in. That is the case which I put.

29055. (*Mr. Ratcliffe Ellis.*) You represent the Cleveland Miners and Quarrymen's Association?—Yes.

29056. Does that Association pretty well include all the workers in the mines?—In Cleveland it does.

29057. What proportion are outside?—Not many now.

29058. You speak generally for the whole of the men who are engaged in the mines?—Yes.

29059. It is ironstone mines you are speaking of?—Yes.

29060. The statistics with reference to falls of roof look very bad in these reports: ironstone mines, 1·940 per 1,000 persons employed. But how many persons are there employed?—I have not the exact number now before me, they are in the Blue Book; I think it would probably be nearly 9,000.

29061. So that you see when you take the number of accidents, which are really very few in number, it would appear to be a very large percentage of the persons employed?—Yes.

29062. Therefore, it really makes it look worse than it is. How many accidents were there last year?—Do you mean fatal accidents.

29063. Take fatal accidents to begin with, if you can tell me the number?—I am not sure whether it was 15.

29064. It was hardly 15, I think. In ironstone mines the fatal accidents from falls of roof and sides were 11, and the non-fatal accidents from falls of roof and sides were 30. So that you see there are not a great many, although the figures look very large?—Oh, that is not a tithe of them.

(*Chairman.*) These are only deaths.

29065. (*Mr. Ratcliffe Ellis.*) The total number of fatal accidents from falls of roof and sides in 1905 was 11 in the whole of the Cleveland Ironstone Mines. I do not suggest for a moment that we should not try to make the number less if we can, but it is not nearly as bad as

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it looks when you say 1·940 per 1,000 persons employed ?—No.

29066. You suggest that in order to secure safety there should be a better qualified deputy to do the timbering ?—Yes. We require that there should be two responsible and practical men who should go together.

29067. I will ask you to refer for a moment to see what rules there are at present which apply to timbering, and see whether I have got them all: there is, first of all, General Rule 21 in the Act ?—Yes.

29068. That applies to ironstone: "The roof and sides of every travelling road and working place shall be made secure, and a person shall not, unless appointed for the purpose of exploring or repairing, travel or work in any such travelling road or working place which is not so made secure." That is a General Rule which applies to ironstone mines ?—Yes.

29069. And it is the duty of the certificated manager who is in charge of the mine to see that that regulation is carried out ?—Yes.

29070. That is the first General Rule. Now coming to your Special Rules, there is Rule 42, which provides: "The deputies are responsible for having ready, and putting into every working place a sufficient quantity of timber, brattice, and other materials; and for setting sufficient timber to afford the greatest possible safety to the workmen employed, and to report any deficiency of timber, brattice, or other material to the overman or back-overman, and they are to brattice all working places where necessary" ?—Yes.

29071. Then your Special Rule 38: "The deputy shall frequently examine the edges of the goaves and working juds"—what is a "working jud"; is that where the men work ?—It is where they are taking out pillars and preparing for a fall.

29072. "The deputy shall frequently examine the edges of the goaves and working juds, and where danger is apprehended no juds are to be drawn until the mine is done working." That is another timbering rule ?—Yes.

29073. Then your Special Rule 41, which says that it is the deputy's duty "immediately to withdraw every workman from any place rendered dangerous by noxious gases or absence of timber," and so on. His duty is to withdraw the men in case of danger ?—Yes.

29074. Special Rule 42 I have read to you. Then Special Rule 43: "To keep all tramways properly secured and in a working state, from the working faces to the in-bye end of the station, or to the rolleyway." That is again a question of timbering ?—Yes.

29075. Special Rule 52: "Each workman in addition to the examination by the deputy, or other officer, must satisfy himself of the safety of his own working place before commencing, also whilst at work, and should the working place of any workman become unsafe from any cause, he is to discontinue working in it, and immediately go or send for the deputy. But if unsafe from want of timber being set, then, in the absence of the deputy, there being sufficient timber of proper lengths in the place, such workman to set it in order to keep himself safe, or cease to work and report the same to the overman or deputy," and so on ?—Yes.

29076. Then Special Rule 56 provides that "No one, unless authorised so to do, shall interfere with, or alter any timber set to support the roof or sides or any ventilating door, brattice, switches, or other appliances." Are all those rules, either General or Special, the rules relating to timbering ?—I think they pretty well cover it.

29077. Do you think that if those rules were carried out there is sufficient protection ?—I should say there was.

29078. So that what we have got to is the question whether or not proper means are taken to see that these rules are carried out ?—Yes.

29079. What sort of timbering is it that has to be done ?—In pillar working it is props.

29080. What height are they as a rule ?—It varies from 7 ft. upwards; we have one mine working at 16 or 18 ft., but I think the bulk of it would be about from 8 ft. to 9 ft. or 10 ft.

29081. Do you find that these accidents happen in the roads or in the working places more generally ?—In the working places.

29082. Have you anything to say against the way in which the roads are timbered ?—No, I do not think we have.

29083. You think that is satisfactorily done by the men, whether they are competent or incompetent, in the roads ?—Yes.

29084. What is the sort of timbering in the working places ? You spoke about baulks ?—Where they are working in whole workings it is generally baulks let into the sides.

29085. What sizes of baulks ?—They drive in places from 12 to 13 and 14 ft.

29086. Are those baulks of such a size that they take two or three men to lift them ?—Yes, it takes two to lift them; it is very heavy timber and the roofs are as a rule not good.

29087. Then those are supported by props underneath ?—No, they generally cut a hole into the stone; it is strong in most places, but if it is necessary they put a prop under it.

29088. One man could not do that work ?—No, he could not do it.

29089. It requires two or three men ?—Yes.

29090. Is there always one man, the deputy, who is a competent man ?—Yes.

29091. What you want is that in addition to the deputy, who is now a competent man, there should be some other person as competent as the deputy to go with him ?—Yes.

29092. Where it takes three men to do it, you want all three men to be equally competent with the deputy ?—We have one competent man sometimes go where there are three going together.

29093. Is that your request—that although now the deputy is a competent man, yet in addition to the deputy the men who have to do the labour with him should be equally well qualified ?—The other man has to cut the baulk hole and to do his part of the business.

29094. Is it your request that the men who go to assist him—two or three, as the case may be—must be equally well qualified as the deputy ?—Yes, if they have to put in timber. If it is cutting away timber or anything of that kind, others can do it, but if it is timbering the place as we have stated in our Statement, where they put the timber in, they should be competent men.

29095. I want to see what this competent man has to do, because if he is nothing more than a labourer there is no need for him to pass an examination. Now what someone has to do is to cut a hole in the stone on each side ?—Yes.

29096. Then the baulk has to be lifted and put upon those supports ?—Yes.

29097. Part of what is required for that is strength ?—Yes.

29098. What is the skilful part of it ?—The skilful part of it is to cut the holes, and to know the nature of the top where they have to put the baulk, and one man is required to assist and look after the other in looking at the roof.

29099. But if you have one man there who is a skilled man to look at the roof and to himself give directions as to how to do the work, does it require the men who have to lift up the baulk and put it in its place to be equally skilled ?—If the man only had to lift it up, no, but he has to take a part in it.

29100. What part has he to take ?—He has to cut the hole and be there to assist the other man.

29101. But if there is a man there who looks after it and who understands the roof, the cutting of the hole is not a great matter of skill ?—No, but the majority of the mines have two skilled men together.

29102. But I want to see the necessity of it ?—There is a necessity. It requires all the eyesight and all the brain-power for them to look after it.

29103. You think one is not enough ?—Yes.

29104. Do you think there should be two skilled men ?—I think there should be two skilled men.

29105. And then the third man should be the labourer ?—There is no third man wanted in most of the mines.

29106. But if there is one wanted, would a labourer be enough ?—Yes.

29107. You think that if you have two skilled men, and it is necessary to have any other labourer there, he need not be skilled ?—He need not be.

29108. You suggest that you would secure this skilled man, this deputy, by an examination ?—Yes.

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29109. I understand you agree that the present deputies are, in the main, skilled men?—In the main, I suppose they are.

29110. Well, you believe them to be so?—I think a good many of them are.

29111. Have they passed examinations?—No.

29112. Then what advantage would they get by passing examinations?—I should let them go on as they are.

29113. How is it that they have become skilled without having passed examinations?—Practice will make them skilled, some of them.

29114. Without passing examinations?—Practice makes some of them skilled, no doubt.

29115. Will examination without practice make a man skilled?—Not exactly; but you want to test him to know whether or not he is skilled enough to go into that responsible position.

29116. Do you know the examination for a second-class certificate?—I do not.

29117. So that you are not able to say whether that examination would be sufficient?—Oh, he would not want that. I would have an examination of a different kind; I would examine him in sounding. For instance, one man might go and sound, and perhaps there would be a thin layer and it would be very tight, and it might sound what is called "drummy," and he might sound a big lump and he would want to know whether that was good or bad. If he understands sounding, it would have a leaden and dead sound if it was bad, but if it was good it would ring off it.

29118. I suppose that is common knowledge to anybody who has done ironstone mining?—Well, it is knowledge to them who have had some experience of it, but outside it is not.

29119. These men who are appointed as deputies are appointed by the managers, are they not?—Yes.

29120. Therefore they must have satisfied the manager that they are competent?—I am not sure about that. He thinks they are competent.

29121. And they are competent as a rule?—As a rule, I should say they are.

29122. Is it not sufficient for a manager to in that way select men that he considers are competent in the same way as he has done in the past?—Not as he is selecting some of them now.

29123. One cannot legislate for exceptions, but generally speaking, however, these men have come to be deputies, they are competent men, and they have been selected by the managers. Is not that examination sufficient for you?—No. The men that we complain about now have been selected by the manager.

29124. How many deputies do you suppose there are in the Cleveland district?—I suppose there would be 300 or 400.

29125. How many are there that you think are incompetent?—We have not taken the numbers of them.

29126. Are there five?—Oh, yes.

29127. Are there a dozen?—There are more than 50.

29128. Have you any statistics to shew that the number of accidents from falls of roof and sides are greater where these incompetent men are appointed?—No, we have not.

29129. Do you know anything about those statistics?—We do not.

29130. When you supply the names you will be able to find out that, will you not, and you will be able to see whether their want of skill makes itself self-evident by the larger number of accidents at the faces?—It may to a certain extent, but it does not follow that that is the whole of it.

29131. What else is there?—We have a lot of agencies at work now that did not use to be at work years ago.

29132. What else is there that you look at in order to see whether these men are skilled or not?—The way in which they do their work. I do not know whether you heard me mention a case in which I was at an inquest where a man was not allowed to examine in the morning, but he was competent enough to stop there; the deputy left at 20 minutes past 12, and then his assistant took charge when he went away, and yet his assistant was not competent to examine in the morning to sound the top, but he was competent to take charge after the deputy had gone.

29133. I heard that you said all that at the inquest?—Yes.

29134. And the Coroner did not agree with you?—The Coroner did not understand it, he was not a miner.

29135. Whether he understood it or not, he did not agree with your view?—Well he said he did not.

29136. The Jury brought in a verdict of accidental death?—The Jury brought in a verdict of accidental death, but there was no fault on the part of the deputy; that came out in the examination.

29137. Will you tell me what examination you suggest there should be? You say you will not leave it to the manager; you say you cannot trust him to select competent people to do this work. What is the sort of examination which you would suggest?—I would suggest an examination by the manager, the under-manager and two miners appointed by the men.

29138. But why? The men are not responsible in any way. The manager is responsible under the Act of Parliament if he does not select competent people?—Yes.

29139. There is no responsibility on the men?—No.

29140. But still you think the men ought to be invited to consider whether a deputy should be qualified or not?—Whether they consider him qualified.

29141. Supposing you have got a Board of that sort, would you propose to have equal numbers, or in what way are you going to decide the question?—I would not be particular—two or three on each side.

29142. Supposing the manager and his side of the Board were of opinion that the man was qualified, and the men's side of the Board were of opinion that the man was not qualified, how would you decide it then?—There would have to be, perhaps, a third party called in.

29143. An arbitrator to decide whether a deputy was qualified or not?—The difficulty might be got over in that way.

29144. Why should you object, if there is to be an examination, to have it decided by some altogether outside authority, as in the case of second-class certificates?—I should not have it as stiff as that, because the miners and men in that position would not be competent to go through a sort of theoretical examination.

29145. But if there is to be an examination, would it not be more satisfactory that it should be conducted by somebody outside both the employer and the workmen?—I think the manager and the workmen at the place could do it the best.

29146. You do not think the manager is competent to do it?—I think the manager is competent if he would only appoint the men, but if the men had a voice in the matter as well, they know the man and know what is required.

29147. Do you think the manager is competent to do it?—He is competent.

29148. Then why not let him do it?—Because we do not agree with the way in which he is doing it now.

29149. In some cases you do agree?—In some cases we do.

29150. There is a very large proportion of the cases in which you do agree?—Yes; in some mines we have not a fault to find with it.

29151. In other cases you do not think the manager is competent to select them. If you will be good enough to send to the Secretary of the Commission a note of the places where these incompetent men are, then it will be possible to ascertain whether there are more accidents under their management than in the other cases?—I should not like to say that there are more accidents. We try to prevent them.

29152. Yes, I suppose everybody would do that. At any rate, you will furnish that information?—Yes.

29153. I think I understood you rightly to say that no person should be appointed a deputy who had not worked as a stone-getter?—Yes.

29154. Would that be a qualification in addition to the examination?—It would qualify him to pass the examination.

29155. But supposing he had not that experience, you would not allow him to sit to be examined?—I do not think I should allow him to be examined.

29156. Is the work of getting stone necessary to qualify a man for examining the roof?—It makes him become acquainted with the nature of the roof.

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29157. You think that experience is of advantage to him ?—Yes, I think that is the best experience he can have.

29158. You would make that a condition of his sitting for examination ?—Yes.

29159. Then no man could be a deputy, however well qualified, who had not worked at stone-getting ?—In my estimation, he would not.

29160. So that you would exclude from the chance of being appointed as deputy any person who had not been an actual workman in getting stone ?—I would.

29161. Now as to the chargeman and driller. The chargeman, I understand, is the man who charges the shot ?—Yes.

29162. And I suppose the examination has to be made by somebody before the men are allowed to go to work ?—Yes, before the fillers are allowed to go to work.

29163. Who does make the examination ?—The chargeman.

29164. Is he a competent man as a rule ?—As a rule, I think they are competent.

29165. Do you want to make any alteration in his qualification ?—I have known men appointed that were not competent to drill. Of course, in the morning the deputy examines the place, and then the man goes in with the drill and he has charge of another young man, who is what they call the "drill changer," and I have known men come in there, and I have had it pointed out by a manager that those men have had no experience, and they have told me that they were going on and how much they were making in a day.

29166. Are you speaking now from your experience or from information given to you ?—Information given to me.

29167. Are you speaking of anything like the universal practice or of a very few exceptions ?—Of a very few exceptions. We have not much fault to find.

29168. As a rule, you think the chargemen are qualified to do the work they have to do ?—As a rule I believe they are.

29169. With reference to the inspection, you think there ought to be an inspection at least every six months ?—Yes.

29170. And that it should be more complete than the inspector makes now ?—Yes.

29171. The Chairman has suggested to you whether you would be in favour of the appointment of a lower grade of inspectors to do this work ?—Yes.

29172. Do you propose that such inspectors should be appointed by the Home Office ?—Yes.

29173. Should they be required to qualify themselves ?—To a certain extent, to see that they are competent for the place.

29174. Do you consider that their duties should be merely examining the roof and sides ?—Principally that.

29175. Would they have to examine for gas ?—Occasionally they would.

29176. Would they have to understand the measurement of the air, the ventilation and other matters ?—Well, that would be a question. I do not know whether they would be capable of doing that.

29177. Why should they not be ?—Of course they could soon measure the air.

29178. Do you not think it is desirable that if a man is appointed as inspector he should be fully qualified to do all the duties of an inspector ?—I would suggest a thoroughly practical man, and that he should be competent to see that all was safe in every respect.

29179. Then he would of course have to be trained pretty much as an inspector is trained ?—Not exactly as far as they are trained now—the theoretical part.

29180. What is the advantage of having a less qualified inspector than you have at the present time ?—Well, the inspectors we have now have not been practical miners.

29181. But if they understand the working of mines is it not sufficient ?—But no man does unless he has been a practical miner.

29182. Then is your view that no person should be appointed as an inspector of mines who has not actually worked as an ironstone getter ?—Yes, for this class that we are speaking about.

29183. Then for the other class you would not make that requirement ?—No, I could hardly do that.

29184. Why not ?—I think that a chief inspector wants to be in such a position that he could put a first-class manager right.

29185. Still he must understand it himself, must he not ?—Yes. He will only know it the same as the manager does ; there are not many of them that have ever been practical men.

29186. Then your view is, at any rate, that although the chief inspector and his assistant need not have been practical working men, yet with regard to these sub-inspectors, if they were appointed, although they must qualify themselves by passing an examination, they must also have been practical working miners ?—Yes ; and if they could pass the other examination I would allow them to do so.

29187. Certainly, there is no reason why a man's class should prevent him getting to the highest post if he is equal to the job. That is your view : you think that would be an improvement ?—Yes, and I think that if you had good thorough practical working men, they would do some real good practical inspection.

29188. They would of course be surrounded with all the restrictions that an inspector of mines is surrounded by as to the use which he can make of any information he gets—they would have to be entirely independent ?—Certainly—independent of all parties.

29189. (*Dr. Haldane.*) Have you many accidents from blasting ?—We have had accidents from blasting, but they are, comparatively speaking, very few.

29190. So that the method used is, on the whole, safe, considering the enormous amount of blasting done ?—Yes. It is pellet-powder—compressed powder—that is used : it is in 2-ounce cartridges, and it is much safer than the loose powder used to be. There are not many accidents in blasting—scarcely any.

29191. How is it fired ?—It is fired with patent squibs : we never fire with fuses. They use a wood rammer to put the powder up with, and a copper or composition needle pricker and stemmer : they have to put the powder in with a wood rammer, and they are very careful indeed.

29192. Have you ever heard of any men being affected by the smoke, I mean being made ill by the powder smoke ?—Yes, often ; but not suddenly ill.

29193. Have you known them to get headaches, and so on ?—Yes.

29194. Does that happen often nowadays ?—Yes, it still occurs to a certain extent : it is not so bad as it used to be.

29195. In what sort of places would that happen—in the stalls ?—As a rule the places are worked about 12 or 13 ft. wide, and the strata varies from 7 ft. to 10 ft. or 10 ft. 6 in. generally. I think the Cleveland main seam is about 8 ft. thick, but at Eston they are working it from about 16 to 21 ft.

29196. Yes, they are very high there.—That is a very high mine, but that is an exception.

29197. On the whole you think the ventilation is good ?—Yes : it is better than it used to be. Of course they have a difficulty now when they are working out pillars : they cannot keep their air-courses up and their stoppings up, and everything, so well as they can in whole workings. We have some mines that are "whole" working : they are not all "brokens," but most of them are.

29198. I think on the whole the life of an ironstone miner is a very healthy one, is it not ? It has that reputation ?—Well it probably is not so unhealthy as some others.

29199. You have some accidents, of course ; but I mean apart from accidents you have nothing much to complain of, have you ?—No, I do not think we have.

29200. You have no special troubles there, have you ? Have you any cases of what they call miners' nystagmus —trouble with the eyes ?—The coal miners sometimes have it.—No, I do not think we have any difficulty about that.

29201. And you have no trouble with the dust ?—No.

29202. It does not do any harm to anyone, apparently ?—No. There is sometimes a little trouble with too much water.

29203. (*Mr. Smillie.*) You have had a long experience as a practical miner ?—Yes, I have had 20 years' experience in the mines as a miner.

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Mr. J. Toyn.

7 Nov., 1907

29204. You represent the limestone quarrymen?—Yes, those who are getting stone for flux for the furnaces: it is all in our iron trade.

29205. Have you had any practical experience as a quarryman?—No, I have not as a limestone quarryman.

29206. Has your long experience as a trade union leader amongst them given you experience of it?—Yes: I have visited all the quarries many times.

29207. It would not be correct to say that you did not understand the position of quarrymen?—No, I fairly well understand the quarries.

29208. Would it be correct to say that a practical coal-miner can understand the practical part of ironstone mining?—It would take him a good bit to do it.

29209. There are many coal miners who have worked in ironstone mines, and there are many ironstone miners who have worked in coal mines?—Yes.

29210. So that in that case they have had experience of both?—Yes.

29211. So far as the nature of the roof is concerned, a coal-miner would have a better opportunity of recognising the danger in an ironstone mine than a stranger who had no experience in a coal mine?—Yes.

29212. I think so far as the sounding of stone is concerned, the same thing applies in an ironstone mine as in a coal mine?—To a certain extent it would apply—to a greater extent, I might say.

29213. I mean that the nature of the roof in coal mines varies from place to place almost as much as it would in different places in ironstone mines?—Yes.

29214. I think your strong point is that deputies, in addition to having the necessary qualifications, should have three years' experience at the face?—Yes.

29215. Is it your opinion that the most valuable experience is that which is gained at the working face?—That is so.

29216. So far as the nature of the roof and also the dangers arising from shot-firing and other things are concerned, that experience is gained at the face more than at any other employment?—There is no doubt about that. Might I explain to you that the tops vary so, and the backs, that is the seams in the roof; there are some what we call saddle-backs, and they are very dangerous indeed: there is a great difficulty in understanding the nature of those backs.

29217. Sometimes it is nearly impossible to find out a saddle-back even by sounding. It may sound all right on the top, but it may fall out without giving any previous warning?—That is so.

29218. But a skilled miner very often knows when he comes in amongst those from the nature of the roof, and he can see from the nature of the roof that he is amongst dangerous saddle-backs?—Yes.

29219. You think that every deputy before being appointed should, as I have said, have three years' experience, and should prove also by examination his qualification for becoming a deputy?—Yes.

29220. That is to say, in the interest of his own safety and for the safety of the workmen under his charge?—Yes, quite as much for himself as for the others under his charge.

29221. Is it your opinion that the deputies are more responsible, as a matter of fact, for the safety of the working miners than even the manager himself?—That is so, a considerable deal more.

29222. And that if it is necessary for a colliery manager to hold a certificate of competency, it is still more necessary that a deputy should hold one?—It is, because the management of a mine begins with the deputy in the morning and finishes with him, and some of the managers do not go in more than once a week.

29223. I suppose there is no longwall working there?—No. It is all pillar and stall—board and pillar.

29224. (*Dr. Haldane.*) It would be quite impossible to work longwall in the thick seams, would it not?—Yes, I think it would.

29225. They are tremendously thick seams?—Yes.

29226. (*Mr. Smillie.*) I suppose the working of the pillars is the most dangerous part of the mining in your district—the taking out of the pillars?—We think it is.

29227. What depth are the mines generally?—Some of them work in on the inclined plane, and I think the deepest mine in our district is about 124 fathoms.

29228. There would be a considerable weight on in taking out the pillars at that depth?—Yes, but they are probably worse where there is the less covering on—for taking out the pillars.

29229. The roof is not so good or so strong?—It is not so good or so strong. It is stronger in-bye.

29230. In taking out your pillars, the men put up the props to keep up the roof as they take out the pillars?—Yes.

29231. And then remove those props afterwards?—Yes, they draw their juds and let the roof in.

29232. That is also very dangerous?—Drawing the juds is very dangerous.

29233. That is also done under the charge of a skilled deputy, I suppose, or a deputy who is supposed to be skilled?—Yes. Mr. Stephens could tell you more about that because he is a deputy, and he has to draw juds frequently.

29234. If a third grade of inspectors were established by law, you would have no objection, I suppose, to their holding a first-class certificate of competency? Provided that they had the practical experience, as one part of their qualification, would there be any objection to their holding a first-class certificate?—Not the slightest.

29235. You are aware that a large number of ironstone and coal miners do hold first-class certificates at the present time?—Yes.

29236. And there would be no difficulty in getting thoroughly skilled and practical men who did hold such certificates, if there was a grade established of that kind?—Not the slightest. We have two or three men who hold second-class certificates now working in the face.

29237. Do any of your miners hold first-class certificates?—I believe we have one.

29238. Do you carry out General Rule 38 as far as regards appointing Inspectors yourself to make examinations?—Yes, we do so in a number of mines, and we are trying to encourage the men to do it all over, and we pay them out of the funds of our Association.

29239. You are aware that that rule lays it down that they must be practical working miners?—Yes.

29240. Do you think that that was a wise provision for the Government to make, that they must be practical working miners?—I do.

29241. It ensured, at least, that they had the skill which you think comes from practice?—Yes.

29242. Are you aware that that rule is interpreted in your district to mean that they must be working at the time of their appointment? Could you appoint men who had been practical working miners who were not then employed?—Well, we never do.

29243. Consequently, you do not know what position your managers would take up if that were done?—No, we do not. They generally appoint men who are working in the mine which they have to inspect. I believe the rule gives power to appoint miners from other mines to come and inspect, but they never do so; they always appoint men out of their own mine.

29244. So far as your own knowledge goes, has the appointment of those men from time to time led to greater safety—I mean to a better observance of the Mines Act?—Yes, we think so. Of course, we cannot tell; we see their reports, and we print them. They make very close inspection, and in some mines it takes them three days to do it.

29245. Of course, if they find anything wrong or any danger, a copy of their report has to be forwarded to the mines inspector?—Yes; the mine manager has a report book, and things are put in the report, and if there is anything wrong they point it out to him and ask him to rectify it.

29246. As a matter of fact, really, an extension of the present system is what you propose, but that it should be set up by the Government?—Yes.

29247. May we take it that, the inspectors having a practical knowledge, as you suggest, they would not interfere in any way with the management of the mine, but that they would report to the chief inspector?—Yes.

29248. You would not give them the powers which are at present conferred upon chief inspectors, but you would make them assistant-inspectors, who would report the results of their examinations to the chief inspector?—Yes.

29249. And then he should take any action which he thought necessary?—Yes. We think it would fill up a

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gap: that the inspectors as they are now deal more with the theoretical part of it, and we would put a practical man in so as to connect the whole thing together.

29250. You think that a thorough examination of your mines, made at least once in six months, and of course oftener if required, would lead to greater safety?—Yes, I think so.

29251. You have no objection, if it would be good for the district, to an extension of it to all mines, I suppose?—Not the slightest.

29252. You say you have 20 mines?—I think there are about 20.

29253. I daresay they vary in extent?—They do.

29254. What is the average number of men employed in them—200?—I daresay in Eston there would be nearly 1,000 men. Some mines have about 300, and some 700: they vary.

29255. From 300 to 1,000? Yes, and there are less than 300 in some of them.

29256. You have given this matter some thought, and you believe that one inspector devoting the whole of his time to Cleveland, Whitby and Rosedale Abbey Districts, could thoroughly inspect those 20 mines?—I think he could do it fairly well.

29257. You say that at the present time, in the case of some of your inspectors who are practical men and who work in the mine and have considerable knowledge of the mine, two men took three days to make an examination?—Yes, it takes three days.

29258. That would be in the case of a large mine?—Yes, it is a mine belonging to Messrs. Pease & Partners. We have had reports sent in just recently, showing that it took them three days to inspect all the working places and air-courses, and we think there should be an inspector appointed to cover the ground which they have covered.

29259. Your chief complaint is not that the present inspectors do not do their work well?—No, I believe they do it very well.

29260. But that it is impossible that they can do it—that they have far too much to do?—Yes, they cannot do it. I am not complaining about their not working hard: I think they do.

29261. You think that perhaps £200 a year would cover the necessary expense so far as your own particular district is concerned?—I should think it would.

29262. And that that money would be well spent?—I do think so.

29263. You believe it would lead to greater safety and probably to the saving of life?—Yes.

29264. (*Mr. Cunynghame.*) You have told us that these mines are inspected by the men under Rule 38?—Yes.

29265. Have they ever in their reports pointed out the incompetency of some of the deputies?—No: they have nothing to do with that.

29266. That matter would not come under their consideration?—No.

29267. You have not stated how often the inspection was made. I suppose it was made at irregular times?—They could make it once a month if they chose.

29268. How often do they make it?—Well, it just varies. If some men come to the lodge meeting and say "Our district is getting a bit smoky," or something like that, they appoint two men to go round. I do not think there is any particular time when they do it, but they do it frequently at some of the mines, and we are asking them to do it at all of them, because we think the money is well spent.

29269. (*Mr. Ratcliffe Ellis.*) You say that you print the reports of those inspections?—Yes.

29270. Could they be supplied to the Commission?—Yes, I daresay we could send you a copy or two of them, at any rate. Our secretary generally prints them at the bottom of other business, but we could supply you with some, I know.

29271. (*Mr. Smillie.*) Might I ask whether those men are paid by the miners who appoint them, or whether they are paid by the Association?—They are paid by the Association.

29272. And you are willing to pay the expenses wherever there are men appointed by any of your miners?—Yes.

29273. Proving that you have given every encouragement for the carrying out of the system of inspection by the men?—Yes; I may say I frequently advocate in my quarterly circular that the men should appoint them, because I think money that is spent to prolong life and to protect it is well spent.

29274. (*Chairman.*) May I ask whether those men are always taken from the mine which they are sent down to inspect, or do you take men from other mines?—I think they are always taken from the mine which they inspect. I have not known a case yet in which the men were brought from other mines.

29275. You do not suppose the manager would make any objection supposing you thought one particular man was an especially good man for the purpose? Would the miners object to your sending him down another mine than the mine which he himself was working in?—I do not know that the mine managers would object. Some of them might possibly say "Have not we men competent enough in our own mine," but I do not think they would object.

29276. You have never done that as a matter of fact: you have always sent men down to inspect the particular mine that they are working in?—Yes.

29277. (*Mr. Wm. Abraham.*) Do you know of any instances where the reports made by these men have been called for at inquests as proof of the condition of a mine at certain times?—No.

29278. My point is this: as a rule those reports made by the men are considered to be as reliable as possible?—Yes.

29279. So that the quality or the grade of men does not prevent the reports being of importance?—They are generally considered satisfactory: in fact I have not heard a complaint against them. I have never heard a complaint that reports were not satisfactory.

Mr. William Stephens, called and examined.

29280. (*Chairman.*) I understand you are a mines deputy. You have heard the evidence given by Mr. Toyn with regard to the qualifications of a deputy. Do you agree with him that there should be some sort of examination?—Yes, I think there should.

29281. And that there should be certificates of competency given?—Yes, I think there should be some kind of examination to test a deputy's qualifications.

29282. Do you think that he should not be allowed to sit for this examination until he has had that three years' experience?—That is so.

29283. With regard to who should conduct the examination, do you agree that it should be conducted by two persons on behalf of the management, and two persons on behalf of the miners?—I may say that is a matter we, perhaps, have not so carefully considered, probably, as we might have done; although we have partially agreed that that would be perhaps a reasonable way for the selection of a deputy.

29284. Have you any fault to find in general with the selection of deputies made by managers? Do you think as a rule that the best men are chosen for deputies by the managers?—Yes, generally speaking, they are.

29285. As a rule the managers, you think, are careful to choose the best men?—Yes.

29286. Generally they do so in their own interest?—Generally speaking.

29287. Do you find that you have incompetent men placed under you sometimes and pressed upon you as assistants?—Personally, no; but there are cases as presented by Mr. Toyn this morning where pressure is brought to bear upon deputies to accept assistants.

29288. People whom you do not consider quite competent to perform the duties?—That is so; who are not competent for that position.

29289. I suppose you would say not only persons who are nominally deputies, but also persons who are assistants,

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Mr. W. Stephens

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and consequently have to perform, on occasions, deputies' duties, ought to have deputies' certificates?—The assistants?

29290. Yes. Do you suggest that?—If they have gone through the proper probation and necessary examination, then, of course, it would be all right. The fact that they are assistant-deputies would not make them qualified unless they had had experience.

29291. But an assistant-deputy may be called on to perform all the duties of a deputy. He may have charge of a mine, and while in charge may have to see to the safety of a roof?—I do not think that the management would allow an assistant-deputy not considered by them properly qualified to perform those duties.

29292. Mr. Toyn has said on occasions he knows the assistant deputy has been left in charge by a deputy for some hours. If a man is left in charge by a deputy, ought not he to be a man who has passed a deputy's examination himself?—He should be.

29293. There might be a great many more people who had passed the deputy's examination than there is room for as deputies, and anybody who passed the examination might be qualified to act as an assistant-deputy?—That is so.

29294. You agree with Mr. Toyn, and you think as regards timbering at all events two skilled deputies should always go together?—From experience I find that is so. It is necessary that two skilled deputies should go together.

29295. You would be content if one man was nominally a deputy and the other an assistant-deputy, providing the assistant-deputy had passed the examination. He would be then a qualified man?—I do not see how he could be an assistant-deputy if he had passed the examination.

29296. There might be a large number of persons qualified as deputies, but yet there would be no room for them as deputies. You would say then that two people who were to look after the roof should always be two deputies, and not only two people who passed the deputies' examination, but two people who occupied the responsible position of deputies themselves?—Properly appointed for that purpose.

29297. It would not be sufficient for a deputy to go about with an assistant-deputy who had passed the examination and in course of time hoped to be a deputy himself?—I do not say as a temporary arrangement. It perhaps would not be wise to draw a hard and fast line and say possibly for a short period that it would not be all right; but to appoint a man and an assistant permanently is a thing we find a great deal of fault with. I do not say for a day or two that it would not be all right in case of a vacancy or anything like that.

29298. You must not have too many persons as assistant-deputies, because that would interfere with the flow of promotion?—Perhaps it would be as well to explain more fully what is meant by an assistant-deputy. Those are not men appointed as assistant-deputies, but they are labourers who are working about the mine, and when there is a vacancy in the face one of those is taken and put in to fill a vacancy, not appointed actually assistant-deputy. He simply goes with this deputy as a labourer in the face, but not understood as an assistant-deputy, although of course he assists the deputy in his work.

29299. Sometimes I understand a deputy will leave the working face before the end of a shift, and leave somebody in charge. The person he leaves in charge, according to your view, ought to be a person who is sufficiently qualified to be a deputy himself?—That is so, and if he is not a deputy he should not be in charge of a district for any time.

29300. You would not allow anybody but a person duly appointed a deputy as well as having a certificate?—A deputy would be wrong in leaving a district without somebody in charge—some qualified person, I mean.

29301. A qualified person need not be a person who has been absolutely appointed as deputy?—If a man was working with me in the day, and was not qualified to take charge of the district, I should not go home until the miners had cleared out.

29302. You might have men with first-class certificates to be managers of the mine, but yet they are not managers of the mine, they are working in the mine; and in the same way you might have a man at the working face, and the deputy might say "You have passed your deputy's certificate; take charge of this place while I am away"?—If he was properly qualified that might be so. He is a qualified deputy in a sense, and there would be no question about leaving him in charge of the district.

29303. No man should be allowed to set or put in timber who had no practical knowledge of timbering. You have all signed this statement?—Yes.

29304. How do you propose to find out whether a man has practical knowledge of timbering? What would be the qualification?—It could only be found out by actual practice.

29305. Have you anything to complain of in regard to that matter—I mean men with no practical knowledge being employed to put up the timber?—Only where complaint has been made this morning, where two men should be doing the work there is only one.

29306. Your complaint is not that two unskilled men are employed, but very often a skilled and an unskilled man?—That is so.

29307. You say it ought to be two skilled men?—Yes.

29308. You say that none but practical men should be allowed to examine places that miners have to work in before they commence their shift's work. Surely that is a matter that the managers see to, that none but practical men examine before a shift?—I think that is carried out. I do not think any shift of miners would commence to work without the place being examined.

29309-11. You have nothing to complain of in that respect?—No, the places are inspected by a practical man before the miners commence their work. Before you leave the deputy question, I should like to give some reason why we think that two experienced men should work together. It is very often the case that deputies, in the course of their shift, are called to examine a place where the roof is very bad, and it is necessary sometimes for one man to watch while the other man works. There is just as much skill required to be a watcher as a worker, and where a place is very bad one, it is often the case that there is great danger. If two experienced men are together, one to watch while the other worked, I think it is better. Often the top is so bad that you are both afraid to work at once. One would sound it, and the other would see, if necessary, to getting the timber in. In the case of an inexperienced man it would be dangerous for the deputy to engage in doing that kind of work.

29312. I should have thought that greater experience was required by the person watching than the person doing the actual work?—You want experience in both cases, working and watching. With regard to the sounding of the roofs, I think a question was asked by Mr. Smillie. In a good many cases in the ironstone mines the roof is so high that you can only judge of the top by sounding it with a sounder. In the coal mines you refer to it is quite easy to sound with one hand, and feel the motion with the other. In the case of the roof being 10 or 15 feet from the bottom, you have to judge of the nature of the top by the sensation caused by the sounding. It requires considerable experience for a man to be able to tell when the roof does really require timber—not so much putting in the timber, as to understand the nature of the top, just when and where timber should be put in to keep the top safe. I confirm what Mr. Toyn has said, that without considerable experience of working in the face, it would be impossible to form an opinion as to the nature of the top.

29313. Do you think that experience could not be got very well under three years?—I do not say three years. There is a great deal of difference in men. Some get more experience in 12 months than others do in five years.

29314. You think that a good average would be three years?—That is so.

29315. Have you anything more you wish to say about timbering?—No, I think that covers it.

29316. Then with regard to the power machine miners. Do you agree with Mr. Toyn's view that there is no objection to employing, as I understand, inexperienced fillers, whose work is of a character that anybody almost can do, but that no inexperienced person should be permitted to take charge of a machine, or be entrusted to fire shots, except they have had at least three years' experience in getting stone in the face to prove their fitness?—The same amount of experience would be necessary to understand the nature of the tops for the machine men with the fillers, as well as for the deputies who have to go in to examine the first thing in the morning. A number of fillers are inexperienced men, and unless an experienced man is in charge, it would expose them to serious danger.

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29317. Do you think it would require three years' experience in getting stone at the face to enable a man to take proper charge of the machine?—I do not think Mr. Toyn has given anything unreasonable. It requires a man of considerable experience.

29318. They must know not only how to drill, but have knowledge of the roof?—That is so.

29319. Just the same as the deputies would have?—Yes.

29320. The qualifications for a man in charge of a machine would be the same qualifications as for a deputy as regards a knowledge of the roof and sides?—Yes, because he is responsible for the men following in filling. When the machine goes out and the shots are fired, that man has to certify that the place is fit for the fillers to follow in. It is necessary to have fair experience for that.

29321. At the same time he has nothing to do with the timbering?—No.

29322. He need not be an expert timberer?—That is so.

29323. He ought to be able to tell when anything is the matter with the roof?—Quite so.

29324. Have you anything more to say about persons in charge of the machine?—No.

29325-29. (*Mr. Smillie.*) Will you clear up the point with regard to the Special Rule 65 which refers to the chargeman. He has to examine the place after the shots are fired?—There is a man with the machine and a man who fires the shot.

29330-1. (*Chairman.*) You have two men: the same man that charges does not fire the shot?—The man that drills the hole with the machine does not fire the shots. There is a man specially appointed for firing the shots, but they work as mates, and share the money earned.

29332. Do you consider at present that any considerable number of shot-firers are incompetent?—I should not say really that a considerable number are incompetent.

29333. Do you think most of them have had the three years' experience which you consider desirable?—They have by this time. When the machines were first introduced they had not. Now I do not suppose there are any working a machine who have not had three years' experience with the machine.

29334. You have nothing to complain of?—Personally, I do not know of a single case.

29335. Do you know a single case where an inexperienced man has had charge of shot-firing?—No.

29336. (*Dr. Haldane.*) Are these electrical or compressed air?—Both, we have both electrical machines and compressed air.

29337. They have taken the place of hand machines?—Yes.

29338. They are all rotary machines?—Yes.

29339. (*Chairman.*) Do you wish to say any more about Rule 65 with regard to the charge-men and shot-firers?—I think Mr. Toyn fairly well covered that question, I do not want to repeat what he said.

29340. As regards inspection, you heard what Mr. Toyn said about that. He thought that there was not enough inspection, and that one working-man inspector should be appointed to look after these Cleveland iron mines?—Certainly. I think it would be a great advantage.

29341. Do you consider that the inspection is insufficient now?—I do.

29342. The best plan would be not to appoint an assistant for the whole district, coal mines and all, but you think you ought to have a working-man whose duties should be simply to look after the iron mines?—We think that would be a great advantage to the Cleveland district. If the inspector comes he cannot go through the whole of the mine when he visits the district.

29343. Perhaps you agree with Mr. Toyn that it is a great advantage that you should have inspection under General Rule 38?—What is that rule?

29344. The rule with regard to workmen's inspection?—Yes.

29345. How often is that done?—Perhaps the advantage of a separate inspector would be that the man would be really an independent inspector. You understand the position of a workman as a rule. He examines, but sometimes those inspectors do not give the actual report that they would on account of their position as working men. That might be jeopardised.

29346. Do you think that is so?—I do not say that is so, but there is that fear naturally with the men. Sometimes, perhaps, they feel afraid to take the course they probably would with respect to inspection.

29347. Has anybody ever complained to you to that effect?—No.

29348. Has anybody ever complained that he has been afraid to make a truthful report?—No.

29349. Do they often make reports calling attention to defects. I mean these workmen when they inspect under Rule 38?—They make their report of course.

29350. Do those reports often contain notices of defects?—Not often.

29351. You think probably not so often as they might?—Probably so. We almost think that is the case.

29352. Still they do occasionally call attention to them?—They call attention to certain defects.

29353. You are not aware in your experience of any man having suffered from having drawn attention to defects in the working of a mine?—No.

29354. Do you agree with Mr. Toyn that the managers are getting more lax than they used to be in the selection of deputies and other men in authority? Mr. Toyn appeared to think that some years ago the management was more careful in the men they appointed as deputies. Do you agree with that view?—As Mr. Toyn pointed out in the illustration he gave this morning, in allowing certain districts to work with one practical man and an assistant.

29355. That is a new thing?—Yes, that is new. It has come into operation the last few years. I quite think the managers are anxious to secure the safety of the workmen in every way, but as far as we are concerned we feel that it is decreasing the efficiency of the management, as the deputies have a very great deal of responsibility with respect to the management of the mine. We think it does not keep the management up to the standard it would with two practical men.

29356. Do you agree with Mr. Toyn that these mines ought to be inspected totally every six months, and that all the working places, air courses and tram roads should be inspected?—I think that is quite long enough, six months. In a mine working in Cleveland great alteration would take place in six months.

29357. Now that you have come to the point of having to take out pillars, you consider that mining is more dangerous than before?—They certainly have the appearance of more danger; unless there is greater care exercised there will be a great many more accidents. I would like to mention one point with regard to the decrease of accidents referred to this morning. Some years ago a lot of strangers were being introduced into the Cleveland mines, and the probabilities were that there were accidents then that would not have occurred if they were practical men as they are to-day. The men working in the Cleveland mines have been working there from boys, and they have been acquainted with the mines up to becoming miners. If strangers were introduced, as they were 20 years ago, there is no doubt that the accidents would considerably increase.

29358. With regard to the statistics I drew attention to at the beginning of the day about the surface accidents, those statistics are compiled from very few men, only about 1,500 men, and it so happens that there were three accidents last year which brought the percentage up enormously. I find on comparing the percentage for this year with the percentage in former years that the surface accidents in ironstone mines do not compare unfavourably with the number in coal mines?—I am glad to hear that. We were surprised at the statement you made, but it has proved to be an exceptional year in the Cleveland district.

29359. There are so few men that the percentage of accidents appears very high?—We were rather concerned about that matter.

29360. The under-ground accidents are rather more than in coal mines, and that is a matter of great importance?—Yes.

29361. (*Mr. Cunynghame.*) Are there any rules in force in your district about the spaces apart at which the timber should be placed?—No, we had an exemption from that rule. An Act was passed with respect to timbering in mines, and we asked for exemption from that Act.

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29362. Why did you ask for that exemption?—In many parts of our district you might work without any timber at all being put in; but in other parts of the district you want three times as much timber as the law would provide for.

29363. The law permitted in certain places that there should be a rule that timbering was to be quite close together, and in other places that timbering should not be put at all. The law did not compel you to have a uniform space right through, and yet you applied for exemption?—Yes, we did.

29364. Do not you think it would be wiser to alter that and have what is called "systematic timbering"?—I do not think systematic timbering necessary in the Cleveland mines.

29365. Why not?—There is no necessity for so much timber as is required by the law in some places, and in other places three times as much is necessary.

29366. In places where it was necessary to have a lot of timber, would it not be better to have systematic timbering for such a place?—We put in as much timber as is required. I do not think that there are complaints as to the amount of timbering put in. We timber the ground according to the requirements of the nature of the ground.

29367. I thought some accidents were due, seven at all events, to the fact that timbering was not sufficiently done in certain places.

29368. (*Dr. Haldane.*) How do the accidents usually occur—from falls of roofs and sides? Is it after the blast or before?—Sometimes. Supposing this is the width, you baulk it as close as you can to the face where the stone is got, and so much stone must be got out before you get the timber in. It is often the case before you get more timber ready the roof comes down. If you get 100 yards square you timber as much as you can, but it often happens that the timber breaks down. The top is of such a brittle nature, and there is only a very small place, and if a small piece falls it kills a man. We have known cases where pieces of 9 or 10 lbs. weight have killed a man.

29369. (*Mr. Cunynghame.*) If it is not due to the want of setting proper timber that the accidents occur, what is it due to?—It is due mainly to the brittle nature at the top. There is no doubt about that.

29370. Is it unpreventible?—I do not think any accidents are unpreventible; but you can see after an accident has occurred in many cases that it might have been prevented.

29371. What can be done? You say the timber that is put up is sufficient?—Yes.

29372. What else can be done to prevent these accidents? The roof is treacherous and pieces fall off in spite of the most careful timbering. What can be done to prevent that happening?—I say exercise all the care we possibly can by employing the most competent men that can be employed for the purpose of examination and timbering.

29373. I gather from you that the men are competent at the present time?—They are. Do you say they were not or they were?

29374. I understand it is your opinion that the men are competent?—Yes, as a rule.

29375. There does not seem very much more that can be done?—Perhaps there is not in that respect.

29376. I am only anxious to know?—I understand; that is right.

29377. With regard to the examination of deputies, as a general rule, all over England the plan of examining workmen has not been generally adopted. It would be rather an unusual thing, would it not?—In what respect.

29378. It would be rather unusual examining people in their duties. For instance, take the men engaged in making steel in the crucible process. I do not know whether you know it. They do not pass an examination?—No, I suppose not.

29379. This suggestion of an examination is rather unusual?—For deputies.

29380. You are of opinion with steel that it is unusual?—There has been no examination previously.

29381. Your proposal is that there should be an examination for deputies?—A practical examination.

29382. Who should conduct that examination?—I should say the manager of a mine ought to know before he selects a deputy that he is competent.

29383. I agree with you, but I want to come to the examination and what is your view. I doubt whether an inspector would be the best person. For instance, take the present Government Inspector of Mines, would he be the best person to examine him?—No, I should say not.

29384. Who would you have to examine them?—A suggestion was made this morning, but we have not perhaps sufficiently considered that question. On the face of it, it appears to me that the management or the manager of a mine should be the person who should be capable of selecting the very best man he has for that position.

29385. This kind of rule should be adopted, that no man should be employed as a deputy until the manager of the mine had certified in his opinion, in writing if you like, that he was capable and proper to be a deputy. Is that the sort of thing you are aiming at?—Yes; I would add also the three years' experience Mr. Toyn mentioned this morning.

29386. You would make that an absolute rule—three years' experience?—I do not think much less than three years would be sufficient to gain the amount of experience.

29387. Would you make it a hard-and-fast rule?—You would have to say a person of experience.

29388. I have known people with five years' experience who never seemed to be able to do anything, sweep a room for that matter?—As I said before, there are some men who will gain as much experience in twelve months as others will in five years.

29389. We know there are accidents, and that you are impressed with the necessity of choosing proper deputies, and you want the greatest possible care to be taken that proper deputies are chosen?—That is so.

29390. You would favour any rule that can be brought about to secure that?—Yes.

29391. You are not prepared to give in exact detail how the thing should be precisely done?—Not with respect to the examination. I do not think we have a mature idea, because we feel the necessity of a district like ours taking every precaution for safety.

29392. You must remember you asked for the exemption yourself. Why did you propose it?—In respect to timbering?

29393. Yes?—I do not think we have any complaint in that direction. There is plenty of timber, and plenty of men to put it in. I do not know any complaints in that direction.

29394. (*Mr. Wm. Abraham.*) Where do the majority of your accidents take place, in the face or on the road?—On the face.

29395. Have you occasionally accidents back on your roads?—We have some accidents caused by sets of wagons running to the shaft bottom and the wagons being drawn out by the drivers.

29396. With regard to the stones falling from the roof and sides, have you any accidents of that kind on the roads?—Yes, we have a few.

29397. Would the systematic timbering of a certain distance not tend to prevent that kind of accident?—If you visited our mines you would see most of the roads are full of timber. There is scarcely room for any more timber at all. Accidents occuring back do not come as a rule as the result of a fall. It might be that a wagon ran off and nipped somebody between the wagon and the side.

29398. Is there any possibility of having improved timbering in the face by using iron logs between the last pair of timbers and the face?—I do not think so. We have some iron baulks used back over the district, but they would not be workable in the face.

29399. They would not be practicable?—No.

29400. Why?—Many of the pillars are split into small portions. You drive a few yards, and come again to cut timber out to make room for the men to get to the stone. If you had iron baulks it would be very difficult. If you put an iron baulk in, in four or five days that place would be finished, and you could not get it out again. It would be too expensive.

29401. You are a practical miner. Is it not possible to use those and place them at certain distances? It may mean a little extra cost, but they can be regained each time to prevent the falling of the roof and the crushing of the sides between the first part of the timber on the face?—It would be possible, but I do not think practicable.

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29402. Why?—I cannot see how it would work. You might as well put a baulk of wood in as a baulk of iron.

29403. A thin layer of iron could be placed where you could not place a baulk of timber?—You would want the width for it.

29404. You would not want the same width for a bar of iron as for a baulk of timber?—Where a whole baulk will not do we have split baulks. We have every kind of timber necessary for keeping up the top. There is no deficiency of timber. Sometimes timber breaks down suddenly. The tops are extremely heavy.

29405. We are now dealing with the working in the face?—In the face sometimes.

29406. When we visited a colliery in Nottingham the other day, we saw that kind of thing being done. It saves accidents from a very treacherous roof?—I wish you could visit Cleveland.

29407. We are only asking, Is it practicable?—I think not.

29408. Is there any more difficulty there than to make a little hole in the solid to put the first end of the bar on?—Where it was convenient to put an iron baulk in we could put in a wood baulk.

29409. It would not require the same space to put a thin iron bar?—There is plenty of height as a rule.

29410. You put them across?—We put timber in every imaginable position. Where we feel that it is necessary to put in timber to keep the place safe, we put it in, and you could not work Cleveland mines unless you put in the necessary timber in every position to keep the place safe.

29411. It is not a question of when you agreed with the management to ask for an exemption of that rule. It is not a question of cost, but a question of impracticability?—Yes.

29412. You are certain upon that point?—It was not a question of cost. We had an interview with the employers before we made application for the exemption, and if the mines could have been worked under that rule it would have saved the employers hundreds of pounds. If we put timber in on those lines and worked the mine on those lines it would have been a great saving to the employers, because more timber is put in than is provided for by the Act. It is not a matter of economy at all.

29413. Mr. Cunynghame put it to you that putting up systematic timbering would not prevent you putting extra timber at all?—No.

29414. You are distinctly of opinion that it is not a question of cost, but a question of impracticability?—I think so.

29415. We are to sit here and believe then that there is no possible way of reducing the accidents in your mines?—There will always be accidents in those mines, so far as my experience goes. The only thing we can do is to take every precaution.

29416. You are taking that now? Is there any extra precaution possible?—We think the efficiency of the management is reduced by the introduction of incompetent men.

29417. Your desire for competent men and examinations is based upon the fact that there are a few here and there employed that are not competent?—That is quite right.

29418. With regard to the Inspectors, can you tell us how the Government inspection that is done at present is being carried out?—There are considerable intervals between the visits of the Inspectors to the various mines.

29419. When the visit is made, how much of the mine is inspected?—Just a district or so, I should think. When the Inspector comes he meets the manager at the bottom of the pit and they agree on a district; they do not go over all the pits, I know quite well.

29420. That district is taken as a sample of what the condition of the whole mine is?—Probably the next time the Inspector comes he will go in another district.

29421-3. His inspection in one district is taken as a sample of the condition of the whole mine?—The Inspector could not spend three days in a mine.

29424. The one district that he inspects at the time is taken as a sample of the condition of the whole mine?—I suppose that is the opinion the inspector arrives at.

29425. In getting another class of men as practical inspectors they would be able to make a thorough inspection of the whole mine?—That is so.

29426. That is the reason you want them?—Yes.

29427. (*Mr. Ratcliffe Ellis.*) You do not suggest that two deputies should always be there when timber is being set?—What we do suggest is where it is necessary for deputies to have charge of miners, that two deputies should work together. We do not say where timber is, because there are places where timber can be set by men not considered to be deputies at all. They may be considered to be labourers who set timber in certain places where miners are not working. Where miners are really working, two competent deputies should set the timber and look after them.

29428. A deputy has a good deal to do besides looking after the timber?—Yes.

29429. An examination by one deputy would do?—That is done now.

29430. You do not suggest two deputies to do any other duties?—No.

29431. Except the timber setting?—Yes.

29432. Part of your time is occupied in setting timber as a deputy?—I will give the day's work of a deputy: we commence at 5 in most places and examine for one hour, and see every place is safe before the miners commence to work. They set to work about half-past six. The deputies follow the miners in their places till 10 o'clock, and then they have time for their refreshments, and then examine those places again, which perhaps takes them half-an-hour. Then they work till about half-past one and then see the men out of the districts again. In actually setting timber it will perhaps be 6 hours.

29433. During this time when are you setting timber? We are setting timber from half-past six till 10 o'clock.

29434. After you have made your inspection?—And signed your report and sent the miners to work.

29435. Would it be practicable to have one of the deputies who had been examining another district to join a deputy who had been examining another district to go and set this timber?—You would have to have somebody in place of the one you have taken out of the district.

29436. I want to see what the deputy is going to do after setting timber. If you had a deputy and he had a competent man with him, I should think it was immaterial whether deputies or not, if competent men?—There are two deputies working together in charge of a district where there are 12 to 18 men. One goes in at 5 o'clock in the morning and examines the whole of the places the men go in. The other goes in at 6 o'clock and after the man has come in at 5, he signs the report and sends the men away. They set timber and keep the men safe during the remainder of the shift.

29437. It would not require another two men to be engaged as deputies in setting the timber after the inspection is made?—The one that comes in at 5 goes home and leaves the man who comes in at 6 to take charge of the district.

29438. That is the practice in many cases?—I believe so.

29439. You wish to make that general?—That is so.

29440. It has been suggested sometimes that a deputy leaves the men in charge of a person who is not a competent man, but is that possible under the Rules as they now stand? I see that the duties of a deputy in Rule 33 are that "He shall, at the end of each day's work, ascertain that all men and boys are out of the district under his charge: but should it be necessary for any of them to remain he shall ascertain that they are left in charge of a responsible person." Then again, with regard to the back overman, "He must ascertain that all workmen and boys under his charge, in his shift, are safely out of the mine, it being his special duty to remain until they have quitted it, but should it be necessary for any of them to remain, he shall ascertain that they are left in charge of a responsible person." There would be the same obligation on the overman?—Yes.

29441. There are three people, the overman, the back overman, during his shift, and the deputy. They are each responsible for stopping in the mine until everybody has left, or putting it in charge of responsible persons?—The deputy reports to the back overman that these men are out when he leaves the district clear and that he has charge over.

29442. What is the difficulty that Mr. Toyn mentioned?—He mentioned a case where a deputy left a district without anybody being responsible—nobody in charge.

29443. That was contrary to the rule?—It was wrong of the deputy. I suppose he was carrying out the

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instructions of the management. It would be wrong to leave the district without someone in charge.

29444. It does not want any alteration of the law: it only wants the law carried out?—Yes.

29445. The law is very clear?—Yes.

29446. (*Mr. Smillie.*) In giving reasons why you claim exemption from the timbering rules, you said that in the Cleveland mines they are sometimes a considerable distance and it does not require any timber because the roof is so good?—Yes.

29447. Would you be surprised to know that most accidents from falls take place where the roof is good?—No; I do not know that I would be surprised.

29448. I think that perhaps might be your own experience where the roof is exceptional and there is less care taken very often?—Where the roof is exceptionally bad there is more care taken.

29449. That is putting the other side of it?—But for that in some of our mines there would be a great number of accidents.

29450. Have you any considerable part of the roof in Cleveland which we as miners understand as solid rock roof which does not require timbering. It is strong enough of itself; it might be for a long distance without a prop at all?—We have some of that kind.

29451. Is there at any time what is known as slipping types coming in from which stones fall without giving much warning?—That is the top?

29452. Yes?—We have not a great number like you have in coal mines.

29453. Are you aware in many coal mines that rules for systematic timbering have been adopted where the roof is exceptionally good?—Perhaps that is so, I could not say.

29454. Systematic timbering really goes on every yard or two yards where there is no apparent reason for timbering at all. Do you think that is wrong?—No, I would not say it was wrong at all.

29455. That is one of the reasons why you claim exemption?—That was one of my reasons, but whether that was one of the reasons given at the time the exemption was claimed I could not say.

29456. I thought that was one of the reasons. Are you aware the proposals made by the Government did not make it compulsory that timbering should really take place. Are you aware that it was not laid down by law that timbering must take place if it was unnecessary it should?—If it was unnecessary?

29457. Are you aware each locality or district was to adopt its own Special Rules with regard to systematic timbering, that is Cleveland could have adopted rules for Cleveland alone, fixing the distance between the props or crowns?—Yes, but they simply asked for exemption without introducing any other system.

29458. I think Mr. Abraham put it to you, and I want to make it clear. Supposing you had systematic timbering in Cleveland, that would not by any means bind you to only put up props where it was laid down by the rules. You would be expected in addition to that to put up all necessary timber, and six or three times as much timber as laid down by the rule?—In cases where it was not necessary we should be supposed to carry out the Act.

29459. To carry out your own Special Rules if you adopted them?—Yes, I see.

29460. I do not think you agree altogether with Mr. Toyn on the question of unskilled workmen being employed as fillers. I take it that where men are filling ironstone after it is blown down there is a danger there too of falls?—Of course there is a danger, but they are protected by the examination by the parties responsible for their safety.

29461. The chargeman, when one or two, or 10 shots, it may be, have been fired, has to make an examination to find out whether, as the result of the shots, the place is safe before the fillers go in?—Yes.

29462. Does he remain in that place afterwards?—No.

29463. He has to ascertain at the present time at least that the place is safe?—Yes.

29464. Or if it is not safe, it is his duty to see that it is made safe?—He gets the deputy to make it safe.

29465. How long might he be away before other shots are necessary—a period of some hours, I suppose?—It would take some time. There may be a good deal, and it would be part of a shift to clear that stone out of the place

29466. While it might be perfectly safe when the chargeman examined it and left it, it might not be safe three hours afterwards?—That is so. He could not avoid what happened if the place was safe when he admitted the fillers. He would have done his duty.

29467. You mentioned the creep coming on?—Yes.

29468. In taking out pillars the creep will be continuously on?—Yes.

29469. The moment you take out pillars there is always a creep on?—I want to make plain that the chargeman is not absolutely in charge of that place. There are deputies in charge of that district at the same time, who are round the district to see the places are safe.

29470. I am really wanting to find out now whether it is more dangerous for unskilled persons who have never been down a mine as fillers, because Mr. Toyn said he had really no objection to unskilled persons coming down from the surface who had not been down before and acting as fillers. I want to find out whether there is any real danger from the roof?—There is a certain amount of danger from their occupation, but when the machineman examines the place and the filler goes in the deputies are commonly in the place. It would not be unusual to go in two or three times during the shift.

29471. They are expected to do that?—They are expected to make a second examination.

29472. As a matter of fact, in your district the deputies do all the necessary timbering, unless occasion arises to put up a prop when the deputy is not there?—Yes.

29473. The man at the working face is not expected to do the ordinary timbering at your work?—No.

29474. The deputy is supposed to do that?—Yes.

29475. Would it be as safe for an unskilled person, who had no practical experience as a miner, even to fill at the face as it would be for a skilled person who knew the nature of the roof?—I do not suppose it would; but still the place is thoroughly examined by the parties in charge of those men when commencing to work. If the men have to work at all they must be exposed to a certain amount of danger.

29476. Any person unskilled or skilled?—If we said that was not safe it would mean the exclusion of all who were not skilled persons in the mine. Taking our experience with reference to accidents, the fillers we think have got on fairly well for that matter. They have not had a big number of accidents.

29477. What is meant by a creep? It is understood thoroughly by miners and deputies and all experienced people that where there is a creep on the roof, the roof might be safe at this moment, and an hour afterwards be very dangerous and require timbering?—That is so.

29478. Would it not be more safe in a case of that kind that practical men with experience should be in that working place than unskilled persons without experience?—There is no doubt of that. You could not work it in that way. If you had to have all experienced men in the mine there would be no room for the inexperienced men at all.

29479. At least you could have one experienced man in each place?—Yes.

29480. As a general rule, you have at least one experienced man in each place filling?—Not fillers, you put fillers in to fill stone. They might be men who have no real experience in the mine, who have been in a week or two.

29481. Is that a breach of any general rule?—We think not, as far as the filling is concerned.

29482. Is it not at the working face?—No, filling the stone down at the face.

29483. They are engaged there as ironstone getters?—They do not get any stone at all, they fill it after it is got.

29484. It is at the working face?—As near the face as they can get to fill.

29485. As a matter of fact, it is absolutely close to the working face. It is blown out and lying at the working face?—Yes.

29486. They are employed at the working face. Do you allow one or two or three or four unskilled persons to fill ironstone at the working place?—Yes.

29487. You allow that without a skilled person in charge?—Yes, the fillers follow in and fill the stone in the places.

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29488. Is that understood to be carrying out the rule with regard to unskilled persons—Rule 39?—Yes, I think so.

29489. Is that the general feeling among the mine managers and deputies of your county?—There has not been any complaint raised on that point at all.

29490. Have you had any experience in a coal mine?—Not as a worker.

29491. You know a coal mine?—Yes.

29492. And the Coal Mines Regulation Act?—Yes.

29493. Would you say that where coal has been cut by machinery underground, and falls to the floor, that persons filling that coal would not be coal-getters?—I should not say that they were coal-getters if somebody got it for them.

29494. Would you say two or three unskilled persons might be employed filling coal which was cut by a coal-cutting machine at the face without a breach of the Special Rule?—Is that not done now?

29495. No, it is not allowed at the present time, but evidently in Cleveland it is allowed?—That is so.

29496. I was particularly anxious to know that?—Yes, that is so.

29497. I did not take it from Mr. Toyn's evidence that that was so, but you are perfectly clear upon that?—Yes, they are not considered to be in any way qualified to take charge or anything of that kind, but they are considered to be capable of looking after themselves and filling the stone after it has fallen.

29498. As a deputy, you gave very frankly your opinion about General Rule 38, as to the examination by the workmen. It is your opinion it does some good in keeping the management up to the mark?—Yes.

29499. While you could not give any cases in which workmen had been unfairly treated for giving adverse reports, you, as a workman yourself and a deputy, say that there is always the fear that there might be?—That is the natural feeling amongst the workmen.

29500. Whether there is any cause is not for you to say?—No, that is so.

29501. You do know that the feeling always exists that they may be injured in their employment?—Yes.

29502. Consequently you, as an official of the mine, say that it would be an improvement if there were Government inspectors who were clear altogether from any influence of that kind?—I think so.

29503. Even where the mines are well managed, and everything is done for the safety of the workmen, it would still be well to have inspectors making a periodical examination?—Yes, I would not suggest doing away with local inspectors.

29504. Still leaving it in their power to do it?—Yes.

29505. I suppose the ordinary examinations by the Inspector of Mines are usually made when an accident takes place?—There are occasionally visits where there are no accidents.

29506. Surprise visits?—I do not know about that. I have not heard of inspectors coming, but I notice that they turn up on certain days.

29507. When a fatal accident takes place there is invariably an examination?—Yes.

29508. Do the inspectors in making an examination after a fatal accident, examine usually only the place where the accident has taken place?—I think that is all. They visit the mine for that purpose.

29509. They do not on that occasion make a general examination of the mine?—Not as far as I know; I think they do not.

29510. They would make a general examination of the mine, or any part of the mine, if their attention was called to anything being wrong there?—Yes, the inspector asks us to notify him if there is anything, in a quiet way.

29511. Do you consider it is a physical impossibility for the present number of mine's inspectors in your district in South Durham to thoroughly examine the mines?—Absolutely impossible.

29512. And that while mines inspection, as it at present exists, has done a great deal of good it would do more good if there were sufficient to make a thorough examination of the mine?—That is so. As Mr. Toyn pointed out, it takes three days to go over some, and it is a physical impossibility to do that.

29513. If they work all their time it is an impossibility?—Yes: we have no fault to find with them.

29514. You do not complain of the inspectors, but you say that they could not do the work you would like to see them do?—Yes.

29515. (*Mr. Ratcliffe Ellis.*) With reference to Rule 39, how is the ironstone got down—by machinery?—By machinery.

29516. Then the men who go in are fillers?—Not always: in a good many cases there are some hundreds of men working back with a rotary drill, which is a small drill they get the stone down with between them, and they fill between them. They are what we term "miners."

29517. Have those men had the two years' experience at the face?—Yes, many of them have been working a lifetime in the place.

29518. Rule 39 is "No person not now employed as a coal or ironstone getter." You consider the persons who are going to fill are fillers and not getters?—Yes. I may say that in a case where a stranger wants to get in the place as a miner, he works in the place as a practical miner.

29519. This only applies to fillers and not to miners?—Yes.

29520. (*Mr. Smillie.*) Are the men who work boring machines getters?—Rotary machines?

29521. Yes.—Yes.

29522. Is the man who stems the hole and charges it a getter?—The two work together on the general mining principle, but where the machines are electric or compressed air machines those men blow the stone down and leave it for somebody to fill: but two working together get their own stone and fill it.

29523. They bore their own holes, charge their own holes and fire their own shots, and that may bring down some stones. They are ironstone getters during the time they are doing that, and they are not ironstone getters during the time they fill?—The Cleveland miners get their own stone and fill. They work one place the whole of the time. They drill a single hole and fire it and fill it up.

29524. An ordinary miner getting his own stuff, filling and sending it out?—Yes.

29525. Under this new system, one man prepares the hole, another man fires the shot, and then the fillers come in and fill?—That is so.

29526. The reason for this rule was because it was considered dangerous for unskilled persons to work at the face?—Yes.

29527. Do you know why it was dangerous?—Was it from falls at the face?—With regard to the blasting, and that kind of thing.

29528. Supposing there is no blasting, are persons prevented from working at the face if they have not had three years' experience?—According to that, you say our fillers are not working under the Act, really.

29529. My point is, is there not a danger which was anticipated by this Act here when men are filling stones which have previously been gotten at the face?—If they have to work underground at all they could not work under more favourable conditions, because their working places are, as a rule, thoroughly examined and looked after.

29530. There is supervision to look after their safety?—Yes.

29531. They may be six hours at the face filling this material without a person being in charge there?—I would not like to define whether they were working under the Act or not.

29532. (*Chairman.*) They might be six hours alone without anybody looking after them?—The deputies are in charge of those men. He goes in at various times during the shift to see that they are all right. He does not continue with them.

29533. (*Mr. Smillie.*) I want to be clear. The chargeman after shots are fired makes a thorough examination of the place in order to make sure whether the roof is safe and other things. Then the fillers who may be unskilled persons go in to fill, but it may be three hours before the deputy comes round to make his examination. He may come in 10 minutes, or half-an-hour, but it may be three hours. If the witness is correct in this, we have sometimes coal-cutting machines which cut 70 or 80 or 90 yards of coal face, and the material falls down on to the bottom. Then you would be correct in saying 60 or 70 unskilled persons may go in and fill this coal and they are not coal-getters. That is not the Act of Parliament.

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Mr. W. Stephens. 7 Nov., 1907.

(*Mr. Ratcliffe Ellis.*) He has given evidence fairly. The witness says, in his opinion if a man has to work underground he could not work under more favourable conditions than these people work.

(*The Witness.*) They are looked after by the parties in the mine appointed for that purpose.

29534. (*Chairman.*) Do you know about coal mines?—No.

29535. (*Mr. Smillie.*) The same clause applies to both. It says coal or iron-stone getters?—Those are not iron-stone getters.

29536. A coal miner who fills the coal at the face after it is blown down is a coal getter?—If he does nothing but fill?

29537. Yes.

(*Mr. Ratcliffe Ellis.*) I do not think so. You may suggest that this clause should be extended to cover these men, but at present it only extends to the man who gets the coal. It is not the drawer.

(*Mr. Smillie.*) The drawer is not a getter.

(*Mr. Ratcliffe Ellis.*) Neither is the filler a getter; that is the point.

(*Witness.*) He is not a getter at all; he does not get any stone.

29538. (*Chairman.*) If you have nothing more to say we will now have Mr. Braithwaite?—No.

Mr. JAMES BRAITHWAITE, called and examined.

Mr. J. Braithwaite.

29539. (*Chairman.*) I understand you are a working miner?—Yes.

29540. How long have you been working underground?—40 years.

29541. Iron-stone only?—Yes.

29542. Do you agree with what you have heard said here to-day about the qualifications of the deputy, that he should have at least three years' experience in getting iron-stone, and pass an examination?—Yes, I do.

29543. You have worked under a good many deputies yourself?—Yes, and I have been a deputy myself for a good many years.

29544. Why did you not remain as a deputy? Is it too hard work?—No, the last time I was deputy, I was deputy at a place we are now making complaint about, and which we wish to have altered. It is where one deputy takes charge of a big district and has four or six men under him, and this is the method that I understand we have come up here to try and get remedied. We do not agree with that method.

29545. You gave up being a deputy because you were asked to take charge of too big a district?—I had charge of it for four years, and I felt that the responsibility was too great, and that I would rather work in the stone as a miner than bear the responsibility.

29546. You thought too great responsibility was put on you, and a responsibility you did not care to face?—Yes. I was in a district where there was a tremendous lot of timbering to be done; sometimes I had four, sometimes six under me, and I have had eight. I have had to send men away in the morning to put timber in, and I have not been in a position to examine it for the day, and I did not care to have the responsibility on my shoulders.

29547. You had such a big district that you could not get round in the course of the shift to see what was going on?—No.

29548. The consequence was that sometimes working faces would be left unexamined by you during the whole shift?—Yes, till the next morning.

29549. Therefore, you complain not only that in some cases the deputies are not properly qualified, but that there are too few deputies to perform the duties?—There were more day-men than deputies. I was the only recognised deputy in the district; the other men were classed as day-men.

29550. They were not sufficiently qualified to do deputy's work?—I should not like to say about qualifications. They had to put the timber in; although they put the timber in, I had to bear the responsibility of it being put in.

29551. You often could not be there to see it put in?—I could not be there.

29552. You come here to make quite a different complaint to what we have heard already. Your principal complaint is that there are not enough deputies to do the work, and that the districts of the deputies are too large?—Too big for one deputy to have the responsibility of.

29553. There ought to be more deputies appointed, you think?—I contend that there ought to be two men appointed to work practically as mates and have a district they can manage.

29554. Supposing you had a mate, would you consider your district would be too large for the two of you?—Yes, that district would.

29555. That district was too large for two?—Yes.

29556. Do you think that still goes on; did anybody succeed you in that district?—Yes.

29557. Is he still continuing to do that district by himself?—I could not say; it is some years ago, and I have not worked at the same mine since.

29558. Would you like to give the name of the mine, or would you rather not?—I do not know that I have any occasion for not doing so. I am speaking the truth. I will tell you—it is Stanghow.

29559. Would you like that put in the evidence or not?—Just as you like. It is the truth, and I am not ashamed of it.

29560. You do not know whether that state of things still continue?—I could not say, I have not been there since I left.

29561. With regard to the qualifications of a deputy, do you consider as a rule that the management choose the best men to act as deputies they can get?—Yes, I believe that they do.

29562. On the whole, the deputies are equal to discharging their duties. They are equal as regards qualifications, but they have too big districts to attend to?—Yes.

29563. Do you consider it necessary that a deputy should pass an examination?—A practical examination.

29564. Not necessarily a written examination?—If a man passes an examination for his certificate it would be no worse for him if he is a young man. I think they ought to be examined as regards the practical part of the work, because the roofs vary very much. In some places they may seem very solid and sound for a considerable time, but through shots being fired and cuttings into the top, it lets air in, and, as is commonly known among miners, the place blows, and it is on the floor in a very few minutes. It may be sound in the morning and two hours after that place may be stopped for want of timber, or on the floor.

29565 (*Dr. Haldane*). What do you mean by "the place blows"?—The working of the place, by the explosion of the powder it cuts into the top, and the air gets into this up the fissures, and there is so much gas and shale at the top that the gas and air work together, and the place blows.

29566. You feel it?—Yes, it causes the place to crack along.

29567. (*Chairman*). Have you anything to complain of with regard to the examination of places the miners work in before they begin their shift? Do you think unpractical men and men of insufficient experience are ever told off for that duty?—No, I have never known unpractical men sent to make an examination. At the time I was speaking of, I had to go in at half-hast four in the morning, an hour and a half before the miners, to make my examination.

29568. In general I may take it you agree with the evidence as regards the appointment of deputies which has been given by Mr. Toyn and Mr. Stephens, but you add a complaint of your own, namely, that the deputies' districts are far too large?—Yes.

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29569. At least, they are in a particular mine ?—Yes.

29570. This particular mine you worked in ?—Yes.

29571. Are they too large in the mine you work in now ?—I am thankful to say in my mine two practical men work together, and they have a district between them.

29572. It is not too large ?—No.

29573. You have nothing to complain of where you are working now ?—No.

29574. With regard to these power machine miners, do you agree with the evidence given, that the safety of the mines suffers from young and inexperienced men being sometimes made chargemen ?—I know it would not be right to put a young inexperienced man as a shot-firer, because it is a very responsible position.

29575. Or in charge of a machine ?—The driller is not so responsible as the shot-firer. He has no explosive, and very often the shot-firer has the place to chalk where he has to drill the holes. He has not so much responsibility as the shot-firer.

29576. With regard to the man in charge of a machine, it might not be necessary to insist that he should have three years' experience in getting stone. That might not be necessary in his case ?—For the driller or shot-firer ?

29577. The driller ?—He wants experience to know how to lay his holes on. No man can do the work without practical experience.

29578. He would not get much experience of drilling by stone getting. He might or might not ?—He wants experience to know how to lay his holes on

29579. In some cases it would not be necessary to work with a drill at all in getting the ironstone ?—No, I do not know. Well, in some pits there are what they call the "pick-work" districts.

29580. Getting stone where no drilling was necessary would not make a man competent, if he worked ten years, to take charge of a machine. A man could probably in less that three years learn how to take charge of a machine ?—Yes, he could in less than three years.

29581. He must have fair experience. Do you think inexperienced persons are often put in charge of a machine and shot-firing ?—I could not say about that.

29582. Are they experienced or not experienced, do you think, to be in charge of a machine and shot-firing ?—They must be experienced.

29583. Are they, as a matter of fact, experienced ?—They must be experienced.

29584. You have no complaint to make as to what occurs in your mine ?—They must be experienced men.

29585. You have no complaint as to what occurs ?—We have no power machines in our mine: it is all hand drillers, hand miners.

29586. With regard to shot-firers, do you think that shot-firers are generally men of sufficient experience to perform their duties properly ?—I could not say. I know that a shot-firer's is a very responsible post for anyone to fill.

29587. You do not complain as to inexperienced persons being put to fire shots in your mine ?—I could not, because I never knew of an inexperienced person being set to be a shot-firer.

29588. With regard to the inspection of mines, do you agree that it is necessary or desirable, at all events, to have more inspection in your mines ?—I think it would be beneficial if we had more inspections.

29589. Do you agree that the best way to get that inspection would be to appoint a working man as an additional inspector ?—I think it would be very beneficial

29590. Better than having another inspector of the present class ?—Yes, I think it would. With regard to working men inspections, they are continually carried out at the pit I am at, and I have been appointed by the men on several occasions to make the examination.

29591. I am glad to have somebody who has done that sort of work. Do you feel you are in the least hampered by what you say ?—Not at all. When we have finished the examination we go into the office and the report-book is placed before us, and to the best of my judgment I write a fair honest report. Some part of the mine I had to make complaint about and ask for things to be remedied, and I may say they were done within a very short time.

29592. You find the management have not the least objection to your finding fault where fault ought to be found ?—No, I do not think they do.

29593. Wherever you have had to make a bad report on a mine, what you have reported has been remedied at once ?—Yes.

29594. Do you know anybody who has suffered through making true reports of his mine ?—No, I do not: I have never heard at all of anyone suffering through it.

29595. (*Mr. Wm. Abraham.*) Have you been appointed by the district to come here or by the mine that you work in ?—I have been appointed by the district, by our own Association.

29596. You are able to speak for the district as well as for the mine ?—Yes.

29597. What is the size of the district that you had charge of when you were a deputy ?—I had two big power machines to follow, and 26 or 28 fillers.

29598. What would be the size of the district ?—About 28 places, 14 places to each machine.

29599. What examination had you to do in the morning ?—I had to thoroughly examine every place and make a report of it.

29600. Who examined the road leading thereto ?—I had to.

29601. What distance had you to travel ?—I am sure I could not say, but a long distance: I should say two or three miles.

29602. To start with, you began at half-past four in the morning ?—That is going round the district from one place to the other and examining the wagon-ways and air-courses.

29603. That is what we wanted to know. You started your work going down at half-past four in the morning ?—Yes.

29604. You had a distance of two or three miles to travel before you came to the working ways ?—Not before I came into my district. My district was close to the pit-bottom.

29605. What was the distance of road you had to examine leading to the working place ? That was my question before ?—I could not exactly say the distance.

29606. Was it a mile ?—I should say it would be to go round by the bank which the stuff came from, from the landings, to go round to the working face, it would be a mile—rather more.

29607. Rather over than under ?—Yes.

29608. When you got to your district the roads and faces you had to examine there added to that would be between two and three miles which you would have to walk ?—I could not say accurately, but I should suppose they would be.

29609. We do not expect you to have measured it to a yard. You had to examine all these places before the men went on ?—Yes.

29610. You had also to follow these two machines. Who examined the place after the shots were put in ?—The shot fireman.

29611. You did not examine them ?—No.

29612. Who examined the timber ?—It was my work to examine the timber.

29613. Who put it up ?—The men working under me.

29614. You told us that the district was too large to enable you to do your work properly as you thought it ought to be done ?—Yes, it was.

29615. Is that a complaint in other places in the district now, that the districts allotted to the deputies are rather larger than they can do ?—I believe there are complaints to that effect.

29616. In your opinion it would be well and necessary that more men should be appointed than that the districts should be made smaller ?—Yes.

29617. That is from the point of view of safety to the men and the mine as well ?—Yes.

29618. That is your opinion, having had 40 years' experience ?—Yes, that is my opinion.

29619. With regard to the examination made by workmen, do you agree with the last witness that what is necessary is that a more minute examination of all the places is necessary than what the Government Inspectors are able to make ?—Yes, I do.

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Mr. J. Braithwaite.

7 Nov., 1907.

29620. Do you think working men like yourself, having passed a practical examination, would be the proper men to do that?—Yes, I think they would.

29621. (*Mr. Ratcliffe Ellis.*) Could you define in any way what the size of these districts ought to be? Is there any rule?—No, there is not; it depends chiefly upon the nature of the ground in which you work. Some districts might have very rotten tops. Two deputies might be kept busy, and have more work than they can get through to follow 12 or 14 men. In other districts where the tops are more solid, and there is not so much timbering required, two deputies might follow 20 or 22 men far easier than the other two would follow 12 or 14 men.

29622. You would have to leave it to the management to decide the size of these districts?—Yes.

29623. But there should be some sort of rule that districts should not be larger than they can be conveniently worked by one or two men?—Two deputies.

29624. Whatever be the general rule, the manager would have to decide as to the size of these districts?—Yes.

29625. With reference to the examination you make under General Rule 38, if you make a thorough examination, we hear it takes three days?—Three days we were examining.

29626. You have yourself to continue working in this mine and undertake any risk that there might be in the mine?—Yes.

29627. So that you would naturally take great care that your examination was a fit one, because any defects there might be you would suffer from if any mischief came from them?—Yes.

29628. In your view are the persons who can most satisfactorily make examinations, the persons who are working in the mine?—Yes.

29629. You think so?—Yes.

29630. (*Mr. Smillie.*) On that point, have you been very many years in the mine you are in at present?—More or less I have worked in it close on 20 years.

29631. Because of having worked there a considerable time you will be well acquainted with the mine?—I am.

29632. And practically all the workings of it?—All the districts. Every district there is in the mine I am fully acquainted with.

29633. Under the Coal Mines Regulation Act are you aware a person is not entitled to leave his own working place? He is supposed to remain in his own working place from the time he comes in in the morning till the time he goes out at night?—Yes.

29634. A person might be in a mine some years without knowing much more about the mine except the district he is employed in?—That is true.

29635. Under circumstances of that kind you might be quite as well qualified to make an examination under this Act in a neighbouring mine as you would in a mine at which you were employed?—Yes.

29636. That is, if you did not know any more about your mine than your own working place?—Yes.

29637. What is really required is the practical knowledge? Yes.

29638. In order to make a thorough examination on behalf of the workmen?—Yes.

29639. To some extent the danger of intimidation is removed where two men might be appointed from one mine to examine another mine, not the one they are working in. To some extent there would be less danger of intimidation?—Yes.

29640. I am not saying that there is any intimidation?—I have not seen any so far as I am concerned.

29641. There would be more freedom to give an opinion of the mine you are really employed in yourself?—I would rather, if I was chosen, make an examination of my own mine than a neighbour's mine, because I think the men at the neighbour's pit might say "We think we have someone in our pit able to make the examination quite well."

29642. I mean if you were appointed by the men at the neighbouring pit to make this examination?—If I was appointed to do it, I would willingly do it.

29643. The men in your pit could not appoint you?—No.

29644. If you were appointed by men in a neighbouring pit, it would be of course, because they believed you to be best fitted for the examination. There are many ways of making a miner feel he has done wrong in addition to dismissing him?—Yes.

29645. A manager can make it hot for a man without dismissing him?—Yes.

29646. Sometimes examiners might feel themselves that they were not being altogether fairly treated, although they could not prove it?—I cannot say that in my own case. It could be done. A manager or an overman, if he had anything against a miner in the place, could, as you say, make it very warm for him.

29647. Without being able to prove that he was being unfairly treated?—Yes.

29648. I do not suggest that is done to any extent, because clearly it is not in your own county. No such thing is done; but I only wanted to bring out the point made by Mr. Ellis that what is really required in an examination of this kind is the practical knowledge and intelligence necessary to give an honest report of what you find?—Yes.

29649. You believe those examinations have done, and would still do, a considerable amount of good from the point of view of proper ventilation and safety?—I am certain they have done good.

29650. You have no desire to give up the right to do this, although you claim an extension of the Government inspection?—No; I think we ought to have the right to do so.

29651. You want to have them side by side?—Especially when a fatal accident takes place, I contend that we should have the right to send two examiners to examine the place where the fatality occurred, so that we are in a position to give evidence if required at the Coroner's Inquest.

29652. That is in addition to the examination under this rule?—Yes.

29653. Where a fatal accident takes place, or a serious non-fatal accident, it is not a bad thing for the examiners who examine to find out whether there is any blame attaching to the officials?—Yes.

29654. You do take advantage of that sometimes?—Yes.

29655. You are examiners?—Yes.

29656. (*Chairman.*) Supposing anything should occur short of an accident that would make you like to make another examination, although the month had not elapsed since the last examination, would the management make any objection to your going down more than once a month if you gave good reasons for asking for another examination?—I do not think they would. I think there is an agreement between the mine-owners and our association that when a fatality occurs they are wishful that two men should be appointed.

29657. Supposing anything had happened, a great fall of roof, which had not hurt anybody, when all the miners were away, would the management object to your going down more than once a month?—I do not know; I have never known that. I do not think they would have any objection.

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FORTY-THIRD DAY.

Wednesday, 20th November, 1907.

PRESENT:

LORD MONKSWELL (*Chairman*).

Sir LINDSAY WOOD, Bart.
H. H. S. CUNYNGHAME, Esq., C.B.
WM. ABRAHAM, Esq., M.P. (Rhondda).
F. L. DAVIS, Esq.
ENOCH EDWARDS, Esq., M.P.
THOMAS RATCLIFFE ELLIS, Esq.
ROBERT SMILLIE, Esq.
S. W. HARRIS, Esq. (*Secretary*).

Mr. HENRY TWIST called and examined.

Mr. H. Twist. 20 Nov. 1907

29658. (*Chairman.*) I understand you have been deputed on behalf of the Lancashire and Cheshire Miners' Federation to give evidence before this Commission?—That is so.

29659. Have you had any consultations with your Federation before coming here with regard to the nature of the evidence they wished you to give?—Yes. The officials have had a small conference and have talked the matter over.

29660. Then you have reason to believe that you represent the opinions of the great majority, at all events, of the Federation?—I am quite sure that is so.

29661. You begin your statement by saying that the present staff of Government inspectors is inadequate to efficiently inspect all the working mines over which they have charge. Will you give the Commission your views on that matter?—We believe that the number of persons employed in the mines and about the mines is such that the number of inspectors now covering that area and having charge over those mines is insufficient. They work out at about one inspector to every 22,000 persons employed. We believe that in order to get efficient inspection there should be one inspector to not more than every 9,000 or 10,000 persons employed.

29662. Then if you have one inspector for every 9,000 or 10,000 persons, how often do you suppose the mines would be inspected during the course of the year?—So far as that inspector was concerned, without assistance he then would not be able to make a competent inspection more than perhaps once every six months.

29663. At present the inspection is about once a year, though some mines are inspected oftener than that?—It just depends upon what you mean when you say "mine"; perhaps a portion of a mine may be sampled, but I venture to think that seldom, if ever at all, is the inspection of a mine completely covered during any period of the year.

29664. Do you think that an inspection should cover every part of the mine?—I do.

29665. And do you think that the appointment of an inspector for every 9,000 or 10,000 men would enable those inspectors to inspect every portion of the mine at least twice a year?—No, I suppose they would hardly be able to cover the whole ground twice per year then.

29666. Therefore even then you think they ought to have some additional assistance?—Yes, I think they would require further assistance.

29667. What further assistance would you suggest?—We should suggest the appointment of, say, a third-grade inspector.

29668. Do you mean a third-grade inspector for every inspector—that an inspector should have an assistant or two, as he has now, and that in addition he should have a third-grade man, so that there would be twice as many inspectors as there are now?—Yes. I should say that it would probably require more than one third-grade inspector to one chief inspector.

29669. Then would you double the number of chief inspectors, or would you leave the districts pretty much as they are at present, and merely have more assistant inspectors, and some third-grade inspectors?—I think there ought to be more chief inspectors, and that the districts should be reduced in area and in number of persons employed.

29670. Would you suggest that the districts should be about double the number?—I think that ought to be so.

29671. And that each district should have a chief inspector at the head, as is the case now, and one assistant, if not two assistants, to help him, and also some third-grade men?—That is so.

29672. How much would you pay the third-grade man?—I should say a man competent to do the work ought to be paid not less than £3 or £4 per week.

29673. I suppose as a rule you would not suggest that he should be a man who would be likely to rise to be an assistant inspector or an inspector, but generally speaking such men would remain at the third grade?—Probably so. He would be a practical man, also giving evidence of his theoretical knowledge by the possession of, say, a third-grade certificate.

29674. Then you would have a third-grade certificate: these men should all have to pass some sort of examination?—Yes, I think they ought to give evidence of their theoretical knowledge of mining, and the probability is that the sitting through an examination and the obtaining of a certificate would be necessary to be quite sure that they possessed competence in that knowledge.

29675. In addition to that would you make it obligatory that they should work for so many years underground?—Yes, certainly.

29676. Five or six years, or something like that?—Yes, probably more than that.

29677. And with these additional inspectors you think it would be possible to inspect every mine in the district thoroughly at least twice a year?—Yes, I think it would.

29678. At all events that is what you are aiming at—a sufficient number of inspectors to do that?—Yes.

29679. If that was done you would consider that that was all that was necessary in the way of inspection—by Government, at all events?—Yes.

29680. Now we will deal with the question of inspection by workmen under Rule 38. I understand you would have Rule 38 altered so that it should read that the inspection might be made "by two of their number, or any two persons who are or have been practical miners": that is to say, you would not confine the persons who are eligible to inspect under Rule 38 to those persons who are at

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present working in a mine, so long as they had worked in a mine and were competent miners ?—So long as they possessed the practical experience and the theoretical knowledge I do not think that the line ought to be drawn to persons actually working in a mine at the time that the situation is required to be filled.

29681. Then would you suggest that mines should be inspected only by persons who are working or have been working in that particular mine, or would you leave it to the men to appoint anybody they pleased to go down to any particular mine they pleased ?—We believe in popular election : that is to say, that the men should appoint these men after they have given proof of their theoretical knowledge. We believe that there should be two of their number then working in the mine, or two who have worked in a mine, and that they should be appointed by the men working in that area over which they have to travel.

29682. Which do you mean—that particular mine, or any mine in the district ? Would you give the men power to appoint any miner working in the district, or would you say a man is only eligible for appointment under this rule who had worked in the particular mine or was then working in the particular mine which had to be inspected ?—You see many firms employ a large number of men and have a large number of pits, and we do not think it would be fair to exclude a man from travelling in another pit other than that in which he had worked : we might find the most competent men in that pit which employed the least number of people.

29683. If you found an especially competent miner for this purpose who was working in any pit whatever in your district, you think the men ought to have power to take him out of that pit and let him examine any pit in the district ?—Yes.

29684. Then you say that these men should be paid by the Government. Have you thought over that carefully : is it desirable that the men should be paid by the Government : would it not be more satisfactory from the men's point of view if they were paid by your Federation or by the men themselves in some way ?—I do not think so. We have the case of a colliery where we have under this rule for years appointed these workmen inspectors, and they have done their work, so far as we are able to judge, fairly well, and it has cost the local miners on each occasion that an inspection has been made about £16 to pay them. We think that the expense incurred has a deterrent effect upon some miners lodges in appointing the men under this rule.

29685. So that on the whole you would be in favour of their being paid by the Government rather than by the men. Do you think that now under the present state of things a miner would get into any trouble for reporting adversely to the system in vogue in a mine ?—We are quite sure that there is a feeling of fear in the men that they would be harshly dealt with if they did make an adverse report.

29686. That is the feeling on the part of the men ?—Yes.

29687. Do you say it is justified or not ?—I cannot give you specific cases, but still among the men themselves who have acted for us I could name two now who are out of this country at the present time and have gone to Canada who performed this work for us, we believe, more faithfully than any other two : they are out of the country now and they themselves left the country feeling that —I cannot say whether it was justified or not—in more ways than one they had given offence, and that they did not have the same chance as they had formerly.

29688. How would you propose to get over that difficulty : would you propose that there should be a certain number of working men appointed, say by Government and paid by the Government, on the recommendation of the workmen, and that those persons should be a kind of workmen's inspectors and do nothing else but inspect mines, so that they should be independent ?—That, in my opinion, is the solution of that problem.

29689. So that you would have two further classes of inspectors : first of all you would have the paid Government inspectors who would be paid £3 or £4 per week, and who would inspect on behalf of the Government, and then you would have a further class of inspectors who should also be paid by the Government, but should be appointed by the men ?—Yes.

29690. And who should do nothing else but inspect ?—Nothing else.

29691. Now as to inspection by officials under General Rule 4, in the paper which is before me you bring a very serious charge against the management of mines : you say inspection under Rule 4 is not at present as efficient as is essential to safety, and that the men appointed are often in some of the most important respects incompetent, and when competent are almost always given too much to do to admit of satisfactory inspection. You say that in some of the most important respects they are incompetent, so that you accuse the management of deliberately appointing incompetent men to inspect the mines under General Rule 4. What have you to go upon in making that statement ?—I have to go upon my own practical experience —my knowledge of men who have been appointed, some of whom have lost their lives immediately after they have been appointed.

29692. Men themselves who have been appointed have lost their lives, having gone into dangerous places, not being sufficiently skilled to know that those places were dangerous, and they have lost their lives in some way, either by falls of roof and sides, perhaps, or by explosions ? —I have a case in my mind now of a man who was a bricksetter's labourer : he went down the coal mine : he was 28 years of age : he became a fireman in a little over six months after being down the mine, and a few weeks after his appointment he was suffocated : there were 20 yards of gas on the intake side of his dead body.

29693. You think that was due to his not being sufficiently cognisant of what goes on in the inside of a mine ?—We could not see how a man who had only been in a mine that length of time could be competent to discharge the duties of a fireman.

29694. You think that is not infrequently the case—that inexperienced men are appointed to the very important position of fireman ?—That is my experience.

29695. Can you give any statistics as to the length of time a man has been working underground when he has been appointed fireman, in the mines which you know of ?—There is the case I have just given you.

29696. Yes, you know of one case of a young man aged 28 who was appointed after six months : but do you think it is a common thing that a man is appointed as fireman after he has been six months in a mine ?—I will not say it is a common thing.

29697. Is it a common thing that men should be appointed after they had served say a year in a mine ?—No, I do not think it is a common thing even after a year's experience. Such appointments are made.

29698. Not often, but sometimes ?—Sometimes such appointments as I have mentioned are made, and made from a class of men who from their experience cannot be competent to discharge those duties.

29699. How long should you say that a man of ordinary intelligence must work in a mine in order to be competent to perform the duties of a fireman ?—It depends upon what age he enters the mine : if he enters the mine as a boy he should have gone through the whole grades of occupation right from a boy's work to the work at the coal face, and he should have some years experience at the coal face.

29700. That is to say, even when he works his way to the coal face, although he has had considerable experience of mining before he gets to the coal face, at all events of the inside of a mine, he must work—what would you say, two years at the coal face before he can become a fireman ?—I should say he should work two or three years at least at the coal face.

29701. Do you think that this is ordinarily the case that men have worked at least two years at the coal face before they have become firemen ?—I should say 25 per cent. of the firemen are men who have not actually worked at the coal face—not actually got coal as colliers.

29702. That is to say that they have never worked as hewers ?—They have been in the haulage roads.

29703. And you do not think that is sufficient experience ?—I do not.

29704. You say that it is the common practice in your part of the world where you are working, that a man should be appointed as fireman who has not worked at the place at all—that is your statement ?—Well, a large number of the appointments are made, so far as my experience extends—I can only speak as wide as my experience—from men who have not actually got coal as colliers.

29705. Men who have not got coal at all ?—Not at all. They have come from the haulage roads, have performed the duties, say, of a day wageman or bratticeman, and then ultimately got to be firemen.

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29706. Without any experience at the face at all?—Yes.

29707. About what sort of percentage of men would you say are appointed in that way? Would you say a quarter of the men are appointed without having worked at the face at all?—Without committing myself to any percentage, I should say that 25 per cent. of them, if not more, are appointed who have not worked at the face.

29708. You think from your experience that about a quarter of the men are appointed as firemen who have never worked at the face at all?—Yes.

29709. (*Mr. Wm. Abraham.*) That they have never worked as coal hewers?—They have never worked as coal hewers.

29710. (*Mr. Ratcliffe Ellis.*) In your view they are incompetent, I suppose, at the present time?

29711. (*Chairman.*) I suppose those men are not necessarily incompetent. I suppose if a man works as fireman for a year or two, at the end of that year or two probably he would be competent, although he might not have been competent at first. He learns his competency by experience as fireman?—Yes; I think a man who has to direct another as to his timbering and spragging the coal face should have had practical experience himself of getting coal, or else how can he advise a man who has actually got it?

29712. Mr. Ellis suggests to me that you go further and say that these firemen who have not worked at the face must necessarily be incompetent. They must necessarily, as I gather from you, be incompetent when they first begin their duties as firemen?—Quite so.

29713. But I suppose an intelligent man who is always giving advice as to timbering, spragging, and that sort of thing, will in the course of time learn his duty?—Yes, of course.

29714. So that although you would say this 25 per cent. of firemen who have never worked at the face must be according to you, more or less incompetent for their duties when they first begin them, still, at the same time, they learn competency by experience as firemen?—I do not see how they can avoid learning.

29715. So that you would modify what Mr. Ellis suggests by saying that these men who have not worked at the face, although they are incompetent at first, are not necessarily all incompetent now?—Certainly not.

29716. Some of them may now be quite competent?—Yes.

29717. (*Mr. Ratcliffe Ellis.*) That a man who was not competent at the beginning may have become competent?

(*Chairman.*) Yes, certainly, by exercising other duties. My suggestion is simply that these men, although they are not competent at first, may become competent by performing the duties of firemen.

(*The Witness.*) I should say that if a man who is appointed to the position of a fireman has not had at his appointment practical knowledge as a coal hewer, he is, from that standpoint, an incompetent man on the day of his appointment.

29718. Just so, but if he is an intelligent man, and carries out his duties faithfully, he will in course of time learn to be a competent fireman, even although he did not begin by being competent?—He will, if he is attentive to his duties.

29719. (*Mr. Smillie.*) But would you say that he never would be as competent as he would have been, other things being equal, if he had had two years' experience at the face?—A man who has not had the actual experience of the getting of coal, can, in my opinion, never be as competent as a man who has had the actual experience.

29720. (*Chairman.*) He may attain greater competency by the exercise of his calling, but he can never be a really first-rate man like the man may be who has been working at the face?—It seems to me to be impossible.

29721. You say that the firemen's districts are too large?—Yes.

29722. Is that so throughout all the mines with which you are acquainted, or is it the case in certain mines?—The work given to firemen varies under different managers, but I think in most cases managers seek to get as much out of their firemen as they can, and call upon them to cover as big an area and take charge of as many men as they can. I think it would conduce very largely to safety if the size of the districts was reduced, and the number of men whom the firemen have charge of were reduced.

29723. Do you say that the districts are too large all through the mines which you know of, or do you think that the districts in some of the mines are of a proper size?—I should say they are for the most part too large.

29724. But there are some that are not too large?—Yes.

29725. So that you level up, so to speak, the worst mines to the standard of the best mines?—Yes, I should attempt to fix a limit upon the number of men over whom a fireman should have charge.

29726. There are some mines where the limit is at present fixed at a reasonable number?—Yes.

29727. You say that certificated managers should be limited to a certain number of underground work-people over whom they should have charge. Do you mean that a man who has a first-class certificate as a manager of a mine should not have complete charge over a whole mine, but that there should be some other manager appointed: is that your idea?—No: our idea is that the tendency at the present time is to give a man supreme charge over too many collieries.

29728. Too many pits?—Yes: and our idea may be perhaps tersely expressed in saying that we believe in one pit one manager.

29729. However many men may be working in a pit, you think you could not very well divide authority in one pit, but that you ought to have one head manager over the men in one pit?—Yes.

29730. You would not have divided authority on one pit however many men were working?—No: I think there ought to be one man as chief manager over one pit.

29731. With regard to discipline, you say that it would be best secured by more efficient supervision and visitation, and that if workmen break any rule you prefer prosecution to fining as a means of its enforcement. I suppose the men sometimes greatly prefer fining to prosecution, do they not?—Occasionally the men may prefer to suffer a small fine rather than be hauled off before the magistrates and have publicity given to the case.

29732. But on the whole it is the opinion of your Federation that discipline should be generally and usually enforced by prosecution and not by fine?—We think that prosecution conduces much more to safety and to discipline generally than fining.

29733. But surely there might be small minor offences which could be easily dealt with by fining—small offences not endangering life?—Whatever the offence be, I should prefer, if there is a law to deal with it, that prosecution should proceed rather than that a fine should be imposed.

29734. Then you say that in every case a man should be prosecuted rather than fined?—Yes.

29735. Even for the first offence, do you say?—Yes.

29736. Well, that is your view: and you think that is the view of the Federation?—Yes: our Federation is totally opposed to fining as a means of effecting discipline.

29737. Now I will come to the question of accidents. You think that many accidents arising from falls of roof and sides would be prevented by systematic timbering, chocking and packing, and with better attention to wastes being drawn off as coal is removed. What do you understand by "systematic timbering"?—We mean that having ascertained the nature of the mine, stipulated distances should be fixed according to the Mines Regulation Act, and that they should be strictly adhered to, that is to say, distances between props. In addition to that, we believe that in long-wall work there ought to be systematic chocking. Much long-wall work is done now without any chocks at all.

29738. (*Mr. Cunynghame.*) What is a "chock"? I suppose it is the same thing as a sprag?—No, not exactly.

29739. (*Chairman.*) It is a cross-piece, I am told?—Yes: a chock is a stack of timber laid crosswise, which when built would cover anywhere from a square yard to almost two square yards of roof.

29740. But now there are rules laid down that the supports must not be more than so many feet apart, are there not?—Those are the mere props—like *this* pencil, comparatively speaking, as compared with a chock.

29741. Then you would say that systematic timbering as I understand it is not duly carried out in the mines with which you are acquainted?—The systematic timbering that we should desire to be made compulsory is not carried out.

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29742. You want it to be made compulsory?—Yes.

29743. Then you say also that if suitable timber were constantly provided and taken to the coal face or actual working place by the management, many accidents would be prevented. Your complaint is, I understand, that the timber is sometimes some little distance from the face, and that the man has to go and fetch it?—It is sometimes hundreds of yards from the face and has to be conveyed along roads where you cannot put your timber on the top of the tub, and the timber has to be dragged the whole distance: that conduces to negligence and to scarcity of timber at the working face, the difficulty being so great in getting it to a man's working place.

29744. So that the man prefers sometimes to run a certain amount of risk rather than lose time in going for this timber and hauling it along?—Well, their wages depending upon the coal they send out, it leads to that.

29745. And you say that that is a matter of complaint in your mines—that it is a common thing for the timber to be a considerable distance off the working face, and that it requires a good deal of time and labour to get it?—That is so. If you would permit me I should like to say this with regard to suitable timber: one thing of which we have to complain very largely is the almost total absence in many collieries of what we call caps or lids. Nothing is more valuable to a miner working under a broken roof than a cap or a lid—in order to cover more roof space. Invariably the men themselves experience very very great difficulty in getting a sufficient supply of suitable caps for setting on props: it gives to the prop a longer life and a greater supporting power, and adds very largely to the safety.

29746. Is the cap a thing in the nature of a mushroom, which you put on the top of the prop and which spreads out?—No, it is in the nature of, say, a short plank, two or three inches thick, which is put on the top of the prop in that manner (*Illustrating*).

29747. A cowl, it might be called?—A cap or top.

29748. (*Mr. Enoch Edwards.*) It is called a lid?—Yes. We think it should be a stipulation that a plentiful supply of lids should be provided.

29749. (*Chairman*). And that is not the case?—That is not the case.

29750. With regard to better lighting and attention to lamps, what have you to complain of?—I do not profess to have any expert knowledge about lamps, but still our men complain largely of the light.

29751. That the light is bad?—Yes. Oftentimes it is the quality of the oil, and sometimes the lamp. The choice of the lamp I suppose being with the management themselves, the lamps are not what they might be: the light is not so good as one would desire oftentimes at the coal face.

29752. You think that more attention might reasonably be paid by the management to seeing that the lamps are in thorough repair and that they give as much light as in the nature of things they can be made to give?—Yes. One is almost constantly approaching the management with a view to obtaining better attention to the lamps, as the result of complaints from men that their lamps will not burn.

29753. Now as regards accidents in shafts: you believe that in all shafts where men are wound the use of detaching hooks, catches, rod-grips and gates to cages should be made compulsory. There are other means of preventing overwinding besides detaching hooks: it has been suggested that there are contrivances by which steam is automatically shut off, so that you would get better winding in that way. I suppose you would not be particular as to how overwinding is prevented, so long as there is some means adopted of preventing it?—Yes: there is Bertram's Visor, which is used as a mechanical appliance for shutting off steam and stopping the cage.

29754. Is that satisfactory?—I do not think it is absolutely reliable: I do not think it would be wise to trust to that only.

29755. You think there ought to be detaching hooks under all circumstances?—Yes.

29756. And that gates to cages should be made compulsory?—Yes.

29757. We had it stated in evidence, I think, that on one occasion an accident had been caused by a gate to a cage—that something happened to the cage and a man wanted to get out in a hurry, but he was kept in by the gate and was consequently very seriously injured: but I suppose that would very seldom happen. On the whole you consider it would be desirable to have gates?—I should consider that far more lives would be lost by gates not being used than by gates being supplied. As a matter of fact there has been an accident in Yorkshire, into which a Coroner and his Jury are now inquiring, in which seven men were thrown out of the cage, and had there been a gate to the cage those men's lives would have been saved.

29758. Then you say further that when men are being wound the cage should be free from full or empty boxes or other material. Is it a common practice to load the cage that is carrying men up and down with material?—Where they have two and three deck cages.

29759. You mean one deck would be loaded with men and another with materials?—One deck would be loaded with materials and two with men, or one with men and two with materials.

29760. You object to that?—Yes.

29761. Why? What danger do you apprehend from that?—We consider that the cage should not contain any greater weight than the men themselves when the men are being wound, and we do not see what good purpose it serves.

29762. What would you do: would you have the particular platform of the cage empty?—Which cage are you speaking of?

29763. Supposing you have only a certain number of men wanting to go down, perhaps only sufficient to fill one of the three decks: what would you do with the other two?—Do you mean of the corresponding cage—the ascending cage?

29764. Yes?—I should have that empty.

29765. But supposing they wanted to be wound?—I should wind men against men.

29766. Supposing one cage, the ascending cage, was quite full of men, all three decks crowded up with men, and supposing the other cage, the descending cage, was only a third full of men, how would you propose to balance the cages except by putting something in the other cage?—I do not think that that would be essential.

29767. (*Mr. F. L. Davis.*) That is not essential?—I do not think that is essential at all.

29768. (*Mr. Ratcliffe Ellis.*) You would wind men against men, but not men in one cage and material in the other?—I should say it would be quite safe to wind men opposite men, that is to say, to have men in both ascending and descending cage, but not minerals in either cage.

29769. (*Mr. Cunynghame.*) When the men are sent down at the beginning of the shift would you have coal then raised—because I do not see how you could get it up?—No.

29770. What are you to put in as a counter-weight to the men going down?—There is no occasion for it; you would not wind coal against men.

29771. There would be nobody to send the coal up at the end of an eight-hours' day; there would be nobody down there. I do not want to argue it, but I do not understand what you mean, do you mean that there is to be nothing wound against the men?—Nothing.

29772. (*Chairman.*) Then you say that men should be wound at a reduced speed. They are not wound at the extreme speed that coal is sometimes wound, are they?—The rule applying to that is that on reaching 20 yards from the landing place, they shall not wind at more than three miles an hour. We believe that in addition to that there ought to be a reduced speed at the meetings.

29773. That is when the two cages meet?—Yes, when the two cages pass the speed ought to be reduced.

29774. But otherwise, subject to that, you would not have any maximum speed for winding men different from winding coal? I believe in Germany there is a difference—that you may wind coal up to 20 miles an hour, or more, and that with regard to men you may only wind them at a less pace. You do not suggest that?—I think that the speed at which men are wound ought to be generally reduced, but particular attention ought to be paid to reducing the speed at the meetings, and the speed ought to be reduced at a further distance from the landing place when men are in the cage, than applies at the present time.

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29775. Then you say as to accidents in haulage roads, that travelling roads should be provided apart from main haulage roads. Is that not rather a large order, that travelling roads should be provided apart from main haulage roads? How would you do that in some collieries?—Many collieries do provide separate travelling roads.

29776. Yes, I quite understand a good many do, but supposing they are old collieries which have been built on a different principle, would it not very often be an enormous expense to provide separate travelling roads?—Where travelling roads have not been provided in the opening out of the mine and they are not existing at present, then it certainly would be a great expense; but we find that accidents in the haulage roads to men travelling often occur in those mines where there is no special travelling road.

29777. Then would you make it compulsory to have in every mine special travelling roads?—Yes.

29778. However expensive it might be?—Yes, we think that alongside main haulage roads there ought to be a travelling road.

29779. And you say that the main roads themselves should be made and kept of sufficient width to allow a space on one side for travelling purposes. That has been very often suggested. You do not think it would be enough if the main roads themselves had this space on one side sufficient for travelling purposes, but even where that is done you say it ought to be made compulsory that there should be separate travelling roads?—I should prefer a special travelling road to, say, a footpath on the side of a main haulage road.

29780. But then it would be extremely difficult and very expensive to make a separate travelling road. Would it not be sufficient to widen the main road so as to have a gangway at the side for the men to go along?—Yes, I think the provision of a sufficiently wide footpath with a more plentiful supply of manholes on that side of the main road would be sufficient.

29781. You say that there should be a more plentiful supply of manholes on the travelling side. At what intervals do you suggest there should be a manhole space?—At every seven or eight yards.

29782. What is the distance now—20 yards?—10 yards: and more in some places.

29783. Is there any General Rule about the distance between manholes?—Yes.

29784. But you do not think that General Rule is sufficient?—No. We think that the manholes should be more plentifully supplied on the travelling side, and not thrown across from one side to the other. If two manholes have the required distance between them, although one is on one side of the road and the other on the other perhaps, that seems to satisfy the law.

29785. The General Rules applying to this are Rules 14, 15 and 16: Rule 14 says that "Every underground plane on which persons travel, which is self-acting or worked by an engine, windlass or gin, shall be provided . . . with sufficient manholes for places of refuge, at intervals of not more than 20 yards," and under certain conditions, 10 yards. You suggest that there should compulsorily be a manhole at every eight yards?—Every eight or 10 yards in main haulage roads where the whole of the men have to travel in and out of the mine: that is what I mean.

29786. And where horses are used what would you say?—I should say one at every 20 yards would be sufficient there.

29787-91. Then you go on to say that more appliances should be used to prevent runaway tubs, and haulage or drawing with scotches should not be allowed where mechanical appliances may be used. What are "scotches"?—Those are scotches put in the wheels, sometimes wood and sometimes iron.

29792. I do not understand what you mean by "scotches"?—If I may explain, there is a good deal of the drawing done by colliers' drawers in Lancashire that is done down inclined planes, ranging in gradients say from 1 in 10 to 1 in 4, and this is done by the drawer himself getting behind the tub with two scotches which are put in the wheels and the scotches skid the wheels the whole distance; that is very often done and it is an exceedingly dangerous practice. We find oftentimes that the supply of what we call a balance wheel at a cost of a few shillings in labour and material would enable the man to travel up and down the brow with his tub much more easily and much more safely.

29793. You think it is a common practice for the men to go in front of the tubs and stop them in that way?—They do not go in front; they are prohibited from going in front, but they get behind.

29794. (*Mr. Cunynghame.*) What is the balance wheel which you refer to? I should like to understand it?—I will explain it to you: suppose this is a brow—an incline (*illustrating*): a man is bringing the tub down, and he would bring the full tub from *that* point to *this* point, assuming that this pencil represents 50 yards or 100 yards. (*Illustrating.*)

29795. He would brake it down the slope?—Yes, he would brake it down the slope with a scotch in each wheel. Now we suggest an appliance of the putting up of two props at the top and a simple horizontal wheel around it with a rope attached to his full tub and a balance tub, that is to say, a small tub filled with dirt to balance it, and then his full tub will pull his empty tub up from the bottom.

29796. (*Mr. Enoch Edwards.*) Is that not the practice in mines?—It is the practice to some extent, but the other method is practised much more in Lancashire.

29797. (*Mr. Cunynghame.*) It is a kind of balance there—a wheel on to the tub. The wheel is a fixture?—The wheel is a fixture behind two tubs.

29798. Then there is a rope from the wheel, I suppose, to the tail of the tub as it is going down?—Yes, and at the other end of the rope there is a small tub of dirt to balance it, so that the full tub is taken down without scotches in it, and the other is drawn up.

29799. Then that would require another line of rails, because there must be a line of rails for the empty thing to come up?—Yes, only that the length of rails for the balance side need only be half the distance of the full tub side.

29800. Yes, one understands that; and the road must be widened accordingly?—Yes, but usually now the roads are sufficiently wide; places are driven nine or 10 feet wide, and the tub itself is not more than a yard wide. So that if the roads are kept open there is ample room to pull up any balances.

29801. And the weight of the balance is equal to that of an empty tub, I suppose?—It is a little more, so that it pulls it up nicely.

29802. (*Mr. F. L. Davis.*) What is the size of the tub you are speaking about?—Ten cwt. capacity.

29803. In other parts of the country perhaps they are 20 cwt. to 25 cwt., so that it is not so easy in all cases. You say there is plenty of room to do that; there may be with small tubs but not with big ones.—Speaking of our County, the highest capacity of any box we use is 11 cwt. and the lowest is 3 cwt.

29804. (*Chairman.*) Then you say these scotches should be used where the mechanical appliance is capable of their being used. Sometimes perhaps the mechanical appliances which you are speaking of are incapable of their being used, and if they are incapable of their being used then they cannot be used.—Just so.

29805. Then you must have recourse to the ordinary methods of stopping the wagon?—Yes: as, for instance, in the case of a man just entering on a coal face up-brow where he had only say five or six yards of rails down, we should not expect that a mechanical appliance should be put there; but in all drawing-brows which are permanent and which range say from 25 yards up to 150 yards, as they do in many cases, there should be.

29806. With regard to the use of safety lamps, you say that their use should be made compulsory in all mines. That is rather a large order, is it not. Is it not perfectly safe to work some mines without safety lamps?—It may be considered safe by the people who are working them, but we believe that we should all be quite sure that they are safe if they used safety lamps.

29807. That is the opinion of your Federation, is it?—Yes.

29808. You go on to say, with regard to investigation into accidents, that you advise that Coroners' Juries should be composed of men who are or have been practical working miners, and power should be conferred upon them to visit the scene of the accident if they so desire. Surely that power is put in practice in England now, is it not: surely no manager would object to a Coroner's Jury going to visit the scene of an accident?—I have seldom if ever known the request to be made, and I do not suppose the Juries themselves believe they have the power.

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29809. (*Mr Smillie.*) The Coroner has no such power?—The Coroner has no power.

(*Chairman.*) The Coroner would have no power to ask the manager, but surely no manager would refuse, would he?

(*Mr. Smillie.*) I think managers would refuse to allow Juries to go down to visit the place.

(*Mr. Cunynghame.*) I should have thought they had the power. You do not mean to say that any person can refuse the right of a Coroner's Jury to enter a place to inspect the scene of an accident in respect of which their inquiry is being held.

29810. (*Chairman.*) You have never heard of a case in which, where a Coroner's Jury has applied to go down a mine to view a place where an accident has taken place, they have not been allowed to do so?—I do not know of any case in which a Coroner's Jury has been refused, but, so far as Lancashire is concerned, I am quite sure Coroners' Juries feel that they have not even the power to make such a request.

29811. I think the sooner they get rid of that feeling the better; I should have though everybody knew they had a right to ask and that they could not be refused. Now we come to the question of drafting Special Rules: you say that workmen's representatives should be given an opportunity of taking part in the drafting and adoption of Special Rules. What further have you to say on that subject?—When Special Rules are being drafted and are about to be adopted, I say that representatives of the workmen should be present with the managers of the mines, and the Inspector of the district to offer suggestions and to confer with them in the drafting of the Rules.

29812. Before the rules have been promulgated by the owners or managers of mines, you would have the miners consulted?—Yes.

29813. So that it comes to this: that the mine owners might have committed themselves to a certain set of Special Rules as being desirable without consulting the men, that then they have these Rules printed and that then the men, as I understand it, may raise any objection they like?—Yes.

29814. But you would say that they ought to have the power of raising the objection at a previous stage?—I think it is much better to take part in the drafting of a thing rather than to sit upon it and offer objections after it has been drafted. I think when a man has drafted a Special Rule it is rather unlikely that he would like to go back upon his own ideas at the suggestion say of miners or of workmen.

29815. He might feel that it was a matter of pride, we will say, to stick to his own opinion?—Well, I rather think he would defend his own opinion anyhow.

29816. Whereas, perhaps if there was a friendly conference before he had put forward his views in public, you think there would be more chance of his changing them—he would be more amenable to reason, as one might put it?—I think he would be more amenable to reason then than afterwards.

29817. (*Mr. Cunynghame.*) You have told us that men would prefer prosecution to fining. A large number of the accidents which occur in mines occur through falls of roof, do they not. You are aware of that?—Yes.

29818. What proportion is due to falls of roof and sides?—In Mr. Hall's district, 48 per cent.

29819. What is your suggestion as to remedying that state of things? That is a large loss of life, is it not?—Very large.

29820. What is your suggestion as to the mode of remedying that?—I think a distinct improvement would be made by the firemen being given less areas to cover, and that instead of being compelled by law, as they are now, only to make one visitation during the shift, they could make two or more visits during the shift, and so have the workmen who were under their charge more constantly before their eyes.

29821. Then you mean it is really due to workmen doing careless things in the absence of sufficient direction and inspection?—No, not exactly that; only I do think that if there was an official there to suggest to the workmen there would be less danger of accident.

29822. That is the same thing—that in the absence of an official there to suggest or direct (whichever you like) the men do careless things which would not take place if there was an official there?—I believe better supervision and more frequent visitation would have the effect of reducing the accidents in that regard.

29823. That is by preventing carelessness?—Yes.

(*Chairman.*) And also ignorance, I suppose.

29824. (*Mr. Cunynghame.*) Carelessness or ignorance?—Yes.

29825. I suppose that would lead to a considerable amount of prosecution if we are to reduce the number of accidents?—Yes. I should say in regard to neglect of any timbering rule, discipline would be better enforced by prosecution than by fining the men.

29826. How many prosecutions do you think it would be necessary to have in a year in your mine? First of all, how many men are employed in the mine where you are working?—I am not actually engaged in the mine now, but the firm at whose colliery I did work have, say, 2,000 men employed below ground.

29827. Supposing there were this increased number of firemen, and that the management were much more strict in regard to timbering, and that they enforced their strictness not by fines at all but by prosecutions, how many prosecutions do you think there would be in a year among those 2,000 men?—I could not give you a very correct idea of that.

29828. Not a very correct one, but will you give it to us as nearly as you can? Have you thought about it?—No, I could not offer you a suggestion.

29829. I tell you frankly that when you come here and suggest things (I am not saying that you do it in bad faith), the value of your evidence would be much greater if you had thought the question out. You ask us to embark in a number of prosecutions, and therefore I put to you how many prosecutions do you think would be approximately necessary in a mine employing 2,000 men?—It would depend upon the offences.

29830. I agree. How many offences do you think there would be? Have you thought of it?—I cannot project my mind into the future, and say how many offences would be committed.

29831. No, but you see you are asking us to project our action into the future?—Quite so.

29832. (*Mr Wm. Abraham.*) Would not the protection you are asking for reduce the offences considerably?—Yes.

29833. (*Mr. Cunynghame.*) I do not say it would not reduce them, but I want you to give us an idea of how many prosecutions you think there would be. It is a perfectly fair question, which I have a right to ask, and if you are able to answer it, it would encourage me to think that you have been considering the question fully. First of all, I will ask you how many fines are there, or how many used there to be, in the pit?—A number of fines are made of which we have no knowledge, but we have records in our Federation of 100 fines being made last year—I mean to say 100 cases where men were fined, and were discharged because they would not be fined. But with regard to the number of fines that have been inflicted, we have no knowledge.

29834. I am not at all necessarily justifying fining; but taking that pit where 2,000 men are working, how many fines were inflicted on those men in the course of a year? If you have not any knowledge on the subject, tell us so?—I have no knowledge; that knowledge is the exclusive property of the manager.

29835. You do not know?—No.

29836. Then you cannot give us any help with regard to the question of what number of prosecutions we should have to contemplate if your scheme is brought into play?—No; but I think the tendency would be such that the prosecutions would be few.

29837. You are in favour of detaching hooks and catches?—Yes.

29838. Have you had experience of the use of those appliances? Do you know places where they are used and places where they are not?—Yes, I have had experience.

29839. It is said by some people that they would fail occasionally and be more detriment than advantage. What have you to say upon that point? Have you by chance read the Report of the Transvaal Commission which sat on this subject?—I have not.

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29840. Can you give us any opinion as to how far it is right to say that these appliances would fail now and then and would be a source of danger?—I think, taking Ormerod's patent as the one I have most knowledge of, if properly attended to it will invariably act, and that the chances of failing are infinitesimal.

29841. What do you mean by "if properly attended to"? What attention does it want?—I should say that once every 24 hours the engineer's man or the engineer himself should overhaul it, and occasionally it should be taken down, cleaned and oiled.

29842. That would be between shifts at some time, I suppose?—Yes.

29843. Can it be detached without detaching the rope from the cage?—Yes.

29844. It can be taken away?—Yes, taken away.

29845. Without detaching the rope?—You have to detach the rope, but you suspend the cage while you draw it on to the landing place. At some collieries they have it done once a week: the detaching hook is taken to pieces by the engineer and put together again and oiled, and kept in perfect trim.

29846. If that is done you have confidence in this particular invention, and perhaps in some others?—Yes, absolute confidence.

29847. I will now come to the question of winding men at reduced speed. Is that done at all in the collieries which you are now representing in Lancashire and Cheshire?—Are you speaking now of the meetings?

29848. No, of the men being wound at reduced speed. Is it done anywhere?—Yes.

29849. In what collieries is it done?—The Bamfurlong Collieries. There the engineer instructs the winders to reduce speed at the meetings as well as when approaching the surface.

29850. That is for men?—Yes.

29851. And not in the case of coal?—No.

29852. Are there any other collieries at which that is done?—Not to my knowledge.

29853. That is the only one?—That one.

29854. How far has that been conducive to safety in that colliery?—Well, they have not had any shaft accident, and therefore one could not say whether the greater precaution is the reason, because in some pits where they have not taken that precaution they may have had no shaft accidents.

29855. Can you call my attention to any case of an accident that has occurred through too quick speed in the winding of the men?—An accident happened a few weeks ago at Fogg's Colliery, where the cages came together in the meetings and nine men were lost. It is the opinion of some engineers that in that case it was due to vibration in consequence of the speed at which the cage was being wound.

29856. Who are the engineers who think that? What is the name of the man who is of that opinion?—I have it given to me second-hand from one engineer at this particular firm where they reduced the speed at the meetings.

29857. I will ask you to mention now the name of that man, but it will not be put upon the notes. What is the name of that man?—Mr. ———. May I say that this opinion has been given to me. I am going now to be perfectly candid, and while perhaps I did feel diffident at stating the name of the person, yet, being pressed, I have given it to you. Now I want to make a straight statement, that this opinion is not given to me by Mr. ——— himself, but it is given to me by a person as from him; and that he, of course, held the opinion, his instructions being that speed should be reduced at the meetings, that that was an extra safeguard in the winding of men, and would prevent accidents such as occurred at Fogg's Colliery.

29858. It is Mr. ——— who held that opinion?—Yes, quite so.

29859. (*Chairman.*) Then, after all, that opinion does not come to so very much, because he has been of opinion that fast winding where the cages met might lead to an accident, and therefore it would be natural to suppose that where an accident did occur when cages met it was caused by vibration, or something of that sort. I mean he does not say in this particular case that he is satisfied that vibration caused the accident, but he merely says he has always been of the opinion that excessive winding might cause vibration and might cause accidents in a general way?—That is so.

29860. (*Mr. F. L. Davis.*) Could you tell us what kind of guides there were at that particular pit at which that accident occurred?—Wooden guides.

29861. (*Mr. Cunynghame.*) Is there any reason in your own knowledge as a practical miner which makes you think it is desirable that men should not be wound so fast as coal?—There is, ample.

29862. What is the reason?—That when the men are being wound the oscillation, whether the rods be wood or wire, is so great that in my belief when cages are passing there is a danger unless there is a good deal of room provided: and in some shafts it is impossible.

29863. To what colliery are you alluding when you say that?—I am alluding to a number of collieries. I have worked in a great many collieries.

29864. I will ask you to give us the name of any one colliery (we will not have the name put on the shorthand notes) where that oscillation occurred to an extent that alarmed you?—Am I to tell you the name of the colliery?

29865. Yes: the shorthand-writer will not take it down, and it will not be put on the Notes. (*The Witness stated the name of a colliery.*) Is that the state of things in existence there or not?—I cannot tell you: it is some years since I was down the mine.

29866. In what year was the case you are alluding to?—That would be in 1889.

29867. Can you not give us a more recent one?—Not from that colliery.

29868. No, but from anywhere?—Yes. (*Witness then mentioned another colliery.*)

29869. When was that in that condition?—That was, say, 12 years ago.

29870. Can you not give us a more recent one?—No. It is ten years since I was in the mine.

29871. Have you heard of any specific mine where the winding is so rapid that vibration occurs and the men are alarmed?—I cannot tell you of a mine.

29872. Is there anything that you would like to add as a reason why the men ought to be wound at a reduced speed besides what you have said? I do not want to miss anything: that is all.—No, only I think it is very essential to take greater precautions.

29873. Yes, I know, but have you any further reasons to give: is there anything else you would like to add?—I do not think there is.

29874. Now as to light. The badness of the light is not due, I suppose, to the lamps being out of repair, is it?—I cannot say exactly being out of repair, but it is due to a bad quality of oil, and in some instances not being sufficiently well cleaned.

29875. Do you say this from observations which you have made yourself, or from reports which you have heard from others, or both?—It is from both.

29876. I will take your own observation first. That would be some years ago, I suppose?—Yes, some years ago.

29877. What was the fault which you observed in the light? Was the wick insufficient, or of bad quality?—The wick, instead of giving off a clear light, was burning itself.

29878. Indicating what?—Indicating that there was bad oil, and in some instances bad ventilation.

29879. Never mind the question of ventilation for the moment, but let us deal with the oil first: we will come to the ventilation in a moment. What was the character of the oil?—I could not tell you.

29880. Was it paraffin or colza?—It certainly was not paraffin: there might have been a drop of paraffin in it to enable it to burn more keenly, but certainly it was not all paraffin.

29881. Did you screw the wick up and yet still would not the lamp burn properly?—Yes. In the lamp I am now referring to we had what we call a pricker—a wire for lifting up the wick—and I have come out of the pit on more than one occasion with as much as an inch and a half of wick sticking up through the tube.

29882. And yet it would not burn?—Yes—it did not give a clear light.

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29883. Did you make complaint of that to anybody?—Yes, oftentimes I made complaints.

29884. Did the men who made inspection of the mine ever make a complaint of it?—Yes, complaints are pretty general with regard to oil.

29885. Did you complain to the Inspector?—Do you mean the Chief Inspector?

29886. The Inspector of Mines of the District, or any of them?—No, I have never personally made a complaint about that.

29887. Do you know whether a complaint was made by anybody?—No, I have no knowledge of any complaint having been made to the Inspector by anybody about the quality of the oil.

29888. With regard to the absence of a balance-wheel and manholes, I do not think any complaints have been made to the Inspectors of the district of the absence of those things, have they?—No. It is taken almost for granted in Lancashire that if a man has a brow he uses scotches if he can hold the tub down.

29889. And in regard to manholes in the same way there has been no complaint?—I cannot give you any specific instance of complaints.

29890. (*Sir Lindsay Wood*). With regard to the rate at which men are wound in the shafts, is it the practice or the custom in your district that in nearly all cases there is a reduced speed for winding men?—Yes, generally the practice is to reduce the speed.

29891. Is not that almost invariable?—Yes: I might go so far as to say almost invariably the speed is reduced as between winding men and winding coal.

29892. In the case you refer to of an accident by some men being thrown out of the cage, which was attributed to vibration of the cage in wooden guides, has there been any inquest?—To which of the cases do you refer?

29893. The case in which there were nine men killed by the vibration of the cage where there were wooden guides?—No: in that case, by some means or other, which even the Coroner's Jury had not been able to fathom, the cage broke away and went down the shaft.

29894. (*Mr. Ratcliffe Ellis.*) No, the case Sir Lindsay Wood is asking you about is the accident at Fogg's Colliery: has there been an inquest there?—Yes, there has been. But Sir Lindsay speaks of the accident being due to vibration, and I want to correct that view. In this case the men were not pitched down the shaft as the result of vibration: the cage itself with the men in it went down.

29895. (*Sir Lindsay Wood.*) I understood what you said just now was that in the accident at Fogg's Colliery the men were thrown out of the cage owing to the vibration?—No: I am speaking of the Yorkshire accident, upon which the Coroner's inquest is now being held.

29896. You stated that a certain engineer told you that it was due to vibration, which was caused by the two cages meeting?—I did not say that an engineer did tell me that: I said information was conveyed to me that a certain engineer's opinion was so-and-so.

29897. Very well: that is what I mean: then I was going to ask you if there were wood guides do you know what distance the slides of the cages were apart. The wood guides could not vibrate?—If the horsetrees—the side supports—are a considerable distance apart there can be vibration in a wood rod that is only, say, 4 ins. square.

29898. You think there would be vibration?—Yes.

29899. To what extent?—Not to the same extent as with a wire rod.

29900. No, but to what extent would a wood guide vibrate with the cage coming up?—I should think it would be possible for a wood guide to be forced out an inch, if the oscillation was great, with a heavy cage.

29901. What are the distances in such case of the cross-stanchions used in support of the guide?—I could not give you the distances in that shaft, but I have known them 6 and 7 yards apart, and so on.

29902. Do you mean 6 or 7 yards, or 6 or 7 ft.?—Well, 5 and more yards apart.

29903. Do you really mean 21 ft. apart? You say that those supports of the guides are 6 yards apart—18 ft?—Well, I cannot say that I have known them 6 yards: I should say 4 or 5 yards apart I have seen them, so far as I have been able to judge of the distance: I have not taken measurements, and I cannot speak as to measurements, my knowledge being from observation that they would be that distance apart.

29904. Were any of the accidents which you told us of just now when men were thrown out of the cage, accidents with guide ropes?—Yes. In the accident in Yorkshire, when seven men were thrown down the shaft there were wire guides, so far as I can speak now: I am not quite positive as to that: I have not seen any information as to whether they were wire guides or not, but I believe they were wire guides.

29905. You cannot tell us?—No.

29906. (*Mr. Enoch Edwards.*) The inquest in that case is not to be held until the 4th December?—That is so, but they sat on Monday last as a preliminary meeting.

29907. (*Sir Lindsay Wood.*) You told us that you considered that the persons who inspected the mines should be two persons from anywhere in the district, and that the men at the colliery should have the power of appointing those persons?—Yes.

29908. And that they should be paid by the Government?—Yes.

29909. Do you consider that those men ought to be men of any employment?—I think it would be much better if their whole time was given up to inspecting.

29910. Yes, but should they be practical men?—Yes, certainly.

29911. That is to say, practical miners?—Yes.

29912. Miners who are engaged in mining as their employment?—Yes.

29913. How does that differ from the present rule, Rule 38?—It differs in this respect, that now they must be chosen from the men who are actually working in the mine at the time, and they must be paid by the men.

(*Mr. Ratcliffe Ellis.*) That is not so, as you will see if you look at the rule: they are not bound to be chosen by the men working in the mine, but they must be practical miners.

(*Chairman.*) They must be practical miners at the moment.

29914. (*Sir Lindsay Wood.*) Your opinion is that they should be practical miners?—Yes: they should have had practical experience at the coal-face and in the mine.

29915. Irrespective of whether that practice is now being carried on by them or not—irrespective of whether they continue to be practical miners?—Yes.

29916. You would not call a practical miner a man who has not been in a mine for 10 or 15 years?—Yes, I should say there are men who have been out of the mine for 10 years who are in every respect practical men.

29917. (*Chairman.*) Your suggestion must be that perhaps for 25 years afterwards they would continue to be practical men because they are always going down the mine and inspecting the mine, and that inspection would keep up their knowledge of mining matters?—I am thinking now more of candidates applying for a position: I do not think it would be right to exclude a man who has been out of the mine a few years, but who has previous to that been in the mine a large number of years.

29918. Then also those men you say would have nothing to do with mining after their appointment: so, in the course of time, as they went on with their work it might be 25 or 30 years since they had had practical experience in the working of mines?—25 or 30 years since they had actually got coal, yes.

29919. But still that would be no objection, from your point of view?—No, I do not think so.

29920. They had been practical miners, and they had since been in the habit of going down the mine, and you do not think that the mere fact of their not having worked as miners for perhaps 30 years would be any objection to their acting in the way you propose?—I do not see that it would interfere with them any more than it would with the chief inspector.

29921. (*Sir Lindsay Wood.*) I think you said that the firemen ought to be appointed from the hewer class: that it was essential that a man should have been working at the face in the mine for a certain period of time more than one year as a hewer before he should be competent to be a fireman?—Yes: I think a man ought to have had some practical experience at the coal-face if he is to be appointed to the position of fireman?

29922. How does he gain the experience by being a hewer?—Well, he gets practical knowledge of the presence of slips and of the dangers that arise in taking coal away,

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where most of the accidents due to falls of roof and sides do occur in actually winning the coal: he gains knowledge here which he cannot gain elsewhere.

29923. Do you go so far as to say that the inspector of mines would be an incompetent man to make a fireman?—No, I am not going so far as that.

29924. That is exactly what you say?—I do not think so.

29925. Because he does not hew coal, and never did hew coal. Then you say that the districts which the firemen have to overlook are too large. What system of working is adopted in your district?—Principally longwall.

29926. Then how many men have the firemen as a rule in your district in longwall workings, that is to say at one time in a district?—The districts vary: they have a couple of hundred men, perhaps.

29927. One fireman for 200 men working all at once?—Yes. Not 200 colliers: probably 100 colliers, including their drawers, and then the haulage hands in the district as well, of course, he has to cover. Oftentimes he is responsible for the haulage in the district as well as looking after the men at the coal-faces.

29928. There would be 100 coal-face men in the district looked after by one fireman?—Yes.

29929. What distance of face would that cover?—The distance of the coal-face would amount to probably 500 or 600 yards in many cases. He cannot visit them successively along one coal-face: he has to travel in and out, and through drawing roads, and get through the cross roads.

29930. But the actual hewing-face would only be 500 or 600 yards?—Yes, 500 or 600 yards of coal-face.

29931. And that would occupy 100 men?—Yes. A collier in long-wall places is usually given say six or seven yards to work in—or five yards.

29932. And that amount of face you think would be too much for one fireman to attend to?—I certainly think it is too much coal-face for one man to examine, and too many roadways for one man to travel and be responsible for.

29933. To what extent would you reduce that?—I should say there ought to be a fireman to not more than say from 40 to 50 colliers.

29934. You stated that you considered there should be one manager for each pit. What do you mean by "pit" in that case?—Each winding shaft.

29935. Therefore there might be several different levels from which coals were drawn, and all those would have to be under one man?—Yes, coal might be sent through different shafts and different tunnels to one pit mouthing and to one shaft, and yet that might be one pit.

29936. In your district does the appointment of managers cover more than one shaft?—Yes, we have chief managers over five or six shafts.

29937. Situate at some distance from each other?—Yes, some of them; others are in close proximity.

29938. You say that you consider there ought to be manholes every 10 yards apart on the engine roads?—On engine roads where men have to travel.

29939. That is very much the same as what is provided for by the present Rule?—I think the rule is 20 yards, is it not?

29940. It is twenty yards where there is sufficient room for the men to travel alongside the engine-way?—It is 20 yards apart in engine brows, is it not, and 50 yards apart where horses draw the trams?

29941. There must be sufficient room for the men to travel alongside the railway where the manholes are 20 yards apart. If there is not room, then the present Rule specifies that they should be 10 yards apart?—I think independently of there being a sufficiently wide foot-path for men to travel, apart from coming into contact with the trams, there ought to be manholes at more frequent intervals.

29942. That is to say, more frequent intervals than 20 yards?—Yes. If a tub runs away and you are midway between two manholes 10 yards is a long way to go—when a tub is running away down an incline of one in four.

29943. (*Mr. Wm. Abraham.*) What is the practice within your experience as to having lids provided for propping?—The practice is that the supply of such timber is very scant indeed, but the desire for it is very great.

29944. When you have such a supply of that timber, is the timber supplied suitable for lid making?—No; it is oftentimes old broken timber sent down from the surface, taken out of broken boxes and bits of prop-ends that have been sawn off and chopped in two, and that kind of thing. It is merely scrap timber; it is not provided as suitable as it ought to be. A lid to be really serviceable should be from an inch to three inches thick, and should be say from six inches to nine inches long and four or five inches wide, and then it forms a good solid substantial cap. But if it is a piece of an old broken tub or a piece of a prop-end, it is not very serviceable.

29945. A lid, generally speaking, has two services to render: to make the prop fast, and to lengthen the space of top that it is under?—Yes. You may say that it has three services: it covers more roof space, it receives the weight, and prevents the prop from capping. Oftentimes it also saves the life of the prop itself, because it is first of all the lid that gets damaged and squeezed, and not the foot or head of the prop. In the third place, you can make your timber more secure and fast when setting it if you have lids to set it with.

29946. In fact, if a squeeze comes on it prevents the prop running into the top or breaking it?—Yes.

29947. So that in your opinion, as a practical collier, it is essentially necessary that suitable timber should be provided for lids?—Yes, it is very essential.

29948. Do men sometimes use sleepers, and things like that, because of the unsuitability of the timber?—Do you mean road sleepers?

29949. Yes.—Yes, I have seen them used.

29950. Is that because they consider them more suitable or because there is a greater supply of them?—For two reasons: one, because there has been no supply of lids, and the other because the prop would be of little utility unless they had something on it.

29951. And if they do use a sleeper what happens?—I know of places where men are subject to fines, or to very serious threats if they use road sleepers for that purpose.

29952. Do you remember since when the practice has existed of managers being able to fine men at all for offences against discipline? Is it a recent practice or an old practice?—It is both an old practice and a recent practice.

29953. Since when has it been legal for colliery managers to do that?—I should say the passage of the Truck Act gave them power to agree with the workman.

29954. When did the Truck Act give them that power do you remember?—My memory does not serve me as to the exact date.

29955. Is it further back than 1896?—Yes, I think you will find it is much further back than that.

29956. Your opinion is that the fear of appearing in a public Court is often a greater deterrent against breach of rules than a man being fined at the colliery?—I am quite sure of that.

29957. Do you think it is a good practice to give the colliery manager the power of deciding for what offence a man should be fined, and what degree of fine a man should incur?—I do not. I think often enough those fines are inflicted when the manager is not in the best frame of mind to do justice to the case.

29958. With regard to the practice of reporting things to the Mines Inspectors, have workmen been in the habit of doing that frequently?—One does know of occasions where it is done, but it is often done anonymously.

29959. On very few occasions?—Yes, I should say, comparatively speaking, very few.

29960. I do not want to put words into your mouth, but I will ask you this: until recently what was the opinion of working men with regard to Mines Inspectors when they saw them coming? Were they coming to inspect in the interests of working men?—Well, the general opinion is that inspection by chief inspectors is far from being adequate and far from being efficient, because a great many men have been down the pit and been at the coal-face practically all their lives, and yet they may never have seen an inspector, the number of inspectors being insufficient to allow for complete inspection.

29961. I am putting this to you simply because it appears that we should be neglecting our duties if we did not inquire what the practice has been. Until recently, was it not the opinion of working men that the

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Government inspectors favoured the employer more than the workmen?—The general opinion of the workmen has been that the inspector has not been as favourable to the workmen as say to the management, that is to say, that he has been lenient towards the management. The general opinion is that the inspector has been lenient towards the management.

29962. I put it to you as a practical man. It is your opinion that the man should be well trained in every grade of colliery work to be a thorough practical man?—I think he must have served his apprenticeship completely by working in a mine from his youth upwards, having performed as nearly as possible every grade of employment in the mine.

29963. And you want us to understand distinctly that there is a danger against which a man must work in the face before he can guard against it?—I am quite sure of that.

29964. And it may be that no practical work whatever in the roads can give him that knowledge?—I think there is something to be learnt from the actual hewing of coal that cannot be learnt from books.

29965. Let us try and explain it together. You speak about slips?—Yes.

29966. Slips in the coal sometimes run up into the soft roof?—Yes.

29967. It is impossible to see such a slip in the top until a piece of coal is broken?—Yes.

29968. Then that being so, a man could not gain that experience in any other part of the work?—There is a large amount of knowledge that can only be obtained by actually hewing the coal itself.

29969. So that it is there at that spot that a man requires practical experience where to put and how to put his props in order to temporarily support the roof?—Yes.

29970. And for the want of that propping even a practical man, if he did not put it up, often receives an injury?—There is danger of injury being done.

29971. Are there not a great number of accidents happening in the face from, not exactly falls of roof, but the clod above the coal falling down with the coal?—Yes. The majority of accidents from roof and sides are at the actual coal-face.

29972. So that at that place the man can and should gain an experience which it is impossible for him to obtain anywhere else?—That is my opinion.

29973. Hence it is essential for a man who has to direct another man where and how to put the prop, to have that experience?—Yes, it is essential. I do not see how he can intelligently direct him unless he has had the experience.

29974. That is what I thought you had in your mind. With regard to travelling roads, I think you admitted that it would be very expensive indeed to make the necessary roads in the old mines?—It would.

29975. But you think that a good broad pathway should be maintained so that men should safely travel in and out by it when machinery is at work?—I think that is a substitute to a travelling road which ought to be insisted upon.

29976. In laid-out mines and mines which are already opened, do you think the return airways could be driven in such a manner, and maintained in such order, that they could be made good travelling roads?—I am quite sure they could if attention was paid to them.

29977. And if that attention were paid to them, and they were made of sufficient size and kept of sufficient size, that would be a means of improving the ventilation as well?—Certainly.

29978. So that you would kill two birds with one stone?—Yes. You would improve the ventilation as well as provide a safe travelling road.

29979. So that at least in future that can be provided without any extra cost?—Yes. I do not see that it would be much additional cost, in opening out a new colliery, to provide a proper travelling road and to maintain it.

29980. (*Mr. Ratcliffe Ellis.*) With regard to the question of inspection, you said that there should be an inspector for every 10,000 persons employed?—Yes.

29981. How many inspectors would that mean?—It would mean 82 to 84.

29982. Yes, there are about 800,000 people engaged and 80 to 90 inspectors would have to be employed?—Yes.

29983. You propose to do that by not necessarily increasing the number of inspectors at present engaged in the district, but by increasing the number of the districts?—Well, perhaps, by both.

29984. Then you propose three grades, I understand: the chief inspector, an assistant inspector and a sub-inspector?—Yes.

29985. All those are to be Government inspectors?—That is so.

29986. Inspectors appointed by the Government?—Paid by the Government; with regard to the sub-inspectors, appointed by the men.

(*Chairman.*) I thought there was a fourth class.

29987. (*Mr. Ratcliffe Ellis.*) Yes; then I thought again there was to be another class of inspectors appointed by the men, according to your suggestion. As I understand, the sub-inspectors, the third grade of inspectors, would be appointed by the men but paid by the Government? There seems to be some doubt about this point; do you say that there are to be three classes who are all to be appointed and paid by the Government, or that the sub-inspectors should be appointed by the men?—We think that the sub-inspectors should be appointed by the men.

29988. What would be the qualification of such a sub-inspector?—That he should give proof of his competency by possessing, say, a certificate.

29989. To whom should he prove his competency?—I suppose there would be boards of examiners.

29990. Appointed by whom?—Appointed by the State.

29991. But what has the State to do with it? These sub-inspectors are to be appointed by the men?—But I am speaking of them now obtaining their certificate; that a board of examiners should examine these men as they now examine men for first-class or second-class certificates, but that the men should have the opportunity of sitting to possess a certificate, the examination for which would not be so severe, but where practical knowledge would be considered a great qualification.

29992. I have no doubt you have carefully thought this over. Would you require that they should have a first-class certificate to begin with?—No, I should not.

29993. A second-class certificate?—Yes; I should say that a man ought to possess the qualifications sufficient to enable him to secure a second-class certificate.

29994. Then is he to pass an examination beyond that?—No, I should think that would be sufficient, with practical experience, to enable him to perform the duties of a sub-inspector.

29995. You know that the men who get the second-class certificates are not men quite of the "first water"?—Many of them or some of them may be good men who do not go in for the first-class.

29996. But the men who get the second-class certificates are not men who can get first-class certificates, I should say?—Well, all men do not try for the first-class certificates.

29997. They are in the nature of under-lookers?—That is so.

29998. Then it must be from that class that the examiners would have to appoint the sub-inspectors?—There are many colliers now possessing second-class certificates.

29999. I only want to know what your scheme is; it would be from that class that you would appoint these sub-inspectors?—Yes—men possessing that theoretical knowledge.

30000. No—men possessing those certificates?—Well, yes, men possessing those certificates.

30001. Would they be under any restraint as to the use they would make of the information which they got in inspecting the pits?—Under any restraint?

30002. Yes; you see a mine inspector now is under certain restrictions; would these sub-inspectors be at liberty to make what use they thought fit of any information they obtained in the course of their inspection?—The information would be used, I should take it, with a view to securing safety.

30003. But what I want to know is, would they be at liberty to make what use they might think fit of any information for any purpose; would they be responsible to anybody, and if so, to whom?—They would be responsible, in the first place, to the chief inspector.

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30004. What has he got to do with it? These sub-inspectors are to be appointed, as I understand, by the Miners' Federation?—Yes; there is to be popular election. We believe in popular election.

30005. By ballot?—By the men of the colliery.

30006. Then what men are to appoint them?—The colliers.

30007. Of any particular pit—or in what way?—Working in the area over which the man has to travel.

30008. As I say, I have no doubt you have carefully thought this over; I want to know what your scheme is?—I should say there ought to be one sub-inspector to every 2,000 work-people, so that he could periodically inspect the working places.

30009. Now we have got to that; then he must be a man who has got a second-class certificate?—Yes.

30010. That is the only qualification. Then how is he going to be appointed?—He is going to be appointed by the votes of the men.

30011. What men?—The colliers, the people working in the mine.

30012. But what colliers? Supposing you say you want a man or you want two or three men for Lancashire, would it be the Lancashire colliers who would vote for him?—Yes.

30013. I want to know what your scheme is for appointing these people?—We should appoint them by the votes of the men.

30014. And they would be responsible only to the men who appointed them?—And their reports would be subject to the criticism of the chief inspector.

30015. Yes, but in regard to their conduct, they could not be removed by anybody except the persons who appointed them?—No.

30016. They would not be responsible to anyone except the persons appointing them?—They would be responsible to the persons appointing them.

30017. That is your scheme. Now do you say that that is a scheme which has the sanction of the Lancashire Federation which you come here to represent?—Yes, so far as I have been able to ascertain.

30018. What steps have you taken to ascertain it?—Only conferring with my colleagues, and from resolutions which have been carried at a conference.

30019. Then in your opinion you have expressed the view of the Lancashire Miners' Federation on this subject?—Yes.

30020. Now as to the inspection under Rule 38; the alteration which you wish to make is that the inspection may be made under that rule by any persons who have been practical miners?—Yes.

30021. The persons to appoint the inspector would, I suppose, be the people working in a particular colliery where the inspection had to take place?—Yes, or in the particular collieries which they were to examine.

30022. The inspection is to be made in the particular colliery?—Yes, or collieries.

30023. No, the inspection is to be made under Rule 38 in this way: "The persons employed in a mine may from time to time appoint two of their number"?—Yes.

30024. Are the persons employed in the mine to appoint the person who is to inspect?—I think the men working in the area over which these men have to travel, whether in one mine or more———

30025. What is it to do with other people? It is the men in the particular mine who have the right to appoint, and you want to extend that too, do you?—Yes.

30026. Then you say that the miners in Lancashire should appoint these people?—No; the miners at Bamfurlong should appoint all the men to examine the Bamfurlong collieries.

30027. That is done at the colliery now?—Yes, that is now done.

30028. How long in your view does it take a man to work at the face in order to become a practical miner?—He ought to have five or six years' experience as a collier.

30029. Do you mean five or six years' experience in working and getting coal?—Getting coal.

30030. Then if he has had five or six years' experience and he is 25 years keeping a shop, in your view he would be still competent for one of these posts?—If he is how long in a shop?

30031. 25 years, we will say?—He is not so competent as a man who has worked at the coal face during that time.

30032. Is this not your scheme, that a man having once qualified himself in the pit by five years at the face, at any time during the rest of his life—it does not matter what he has been doing in the interval—is competent to fill one of these posts?—He is a practical man.

30033. And he is a man whom you say would be suitable for the purpose of making an inspection?—Yes, a man who has had that number of years' experience at the coal face is a man who has acquired the necessary knowledge to fit him for that purpose.

30034. And 25 years afterwards he is still qualified if he has been keeping a shop in the interval?—I think there would be very little likelihood of a man who had been keeping a grocer's shop being appointed.

30035. But he is still qualified in your view?—Yes; if he has had five or six years' experience at the working face I say he is a practical man.

30036. With regard to inspection under General Rule 4, do you think there are 25 per cent. of the firemen in the Lancashire collieries who are incompetent men for their duties?—I think there are 25 per cent. of the firemen who have not actually got coal.

30037. But I understand your view is that no man who has not actually got coal is competent to perform the duties of a fireman?—Is not as competent as a man who has got coal.

30038. But I understand you to say that he is not competent to perform the duties of a fireman?—I am not going so far as to say that he is absolutely incompetent; he is not as competent.

30039. But although he has not got coal, may he be competent to perform the duties of a fireman?—In a measure, but not as competent as a man who has.

30040. But is he sufficiently competent?—In some instances he may be.

30041. I want you to consider this: think what a serious thing it is that you should condemn in this off-hand way 25 per cent. of these men who are officials at collieries in Lancashire.—I do not know that I have condemned them. What do we say about them?

30042. It was 50 per cent. you took to begin with, but then you came down to 25 per cent.?—I say they are not at present as efficient.

30043. Are they inefficient—because that is the point?—In a measure; in degree.

30044. Will you go so far as to say this, that in your judgment, speaking with responsibility, there are 25 per cent. of the men who occupy the position of officials in mines in Lancashire who are inefficient?—No, I will not say that; but I will say that they have not had experience at the coal face as miners, and therefore they cannot be as efficient as men who have had that experience.

30045. Then does it merely come to this, that in your view no man can be efficient unless he has had four or five years' work at the face?—He cannot be so efficient as if he has had that experience.

30046. But are these men sufficiently efficient to provide for safety?

(*Chairman*). What I understood the witness to say in answer to that was that they were not originally perhaps efficient, but that if they performed their duties faithfully they learnt by experience, in performing their duties, how to perform them.

(*Mr. Ratcliffe Ellis.*) My view is that this is a most unjust aspersion upon the qualities of the firemen in the county of Lancashire, and I think it will be regarded very seriously by the men engaged there.

(*Chairman.*) I understood the witness to mean that 25 per cent. were persons who were made firemen before they were competent, but that in course of time they may have become competent; I did not understand him to say that in his opinion 25 per cent. of the firemen engaged in Lancashire are now incompetent.

(*Witness.*) I do not say that.

(*Mr. Ratcliffe Ellis.*) I say it is an equally objectionable statement to make that the persons who are responsible for the management of the mines in Lancashire did at any time appoint men to the number of 25 per cent. who were incompetent men as firemen.

(*Witness.*) In my view incompetent.

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30047. Is that the view also of the Lancashire and Cheshire Miners' Federation?—So far as I am able to express it.

30048. Do you seriously think you are justified in saying that the managers who were responsible for the safety of the miners and for the management of the mines in Lancashire, have appointed as efficient to discharge their duties 25 per cent. of incompetent men, and men who have had to learn their duties since they were appointed?—To learn some portion of their duties; I am not going to be drawn into saying that I believe these men are now or were at any time absolutely incompetent; that is not what I mean. What I do mean is this, and what we feel is this: that at the time of appointment a man who has not had actual experience of getting coal is not as competent as a man who has.

30049. In your judgment has that resulted in more accidents than there would have been if they had selected colliers?—I cannot speak as to that.

30050. You do not think so, I daresay?—I have nothing to go upon.

30051. Now will you tell me your experience. How long did you work at the face?—About 11 years.

30052. What did you do before that?—I did everything, from door tenting to getting coal.

30053. From door tenting you worked up, and then you worked 11 years at the face?—Yes.

30054. Do you find there are many men working at the face who want to become officials of the mine?—There are many young men studying regularly now.

30055. But will you answer my question? You understand it perfectly and I shall come back to it, so that you may as well answer it at once. Do you think there are many men working at the face who are anxious to become officials of the mine?—Yes, there are a large number who would gladly accept a position as an official.

30056. Is it a better place, or is it easier, or what is the inducement?—It is an opening, I suppose, for what they consider to be a higher position in the mine than that of coal getting.

30057. Is a man who has worked five or six years at the face in getting coal, from your experience the sort of man who wants to be an official of the mine?—In the majority of cases he may not be, but there is a percentage who would willingly occupy the position.

30058. Should I be justified in saying that in the majority of cases men who have worked five or six years at the face do not wish to be officials?—Yes, I think you would be right in saying that the majority would not.

30059. You have given your view as to the number of men who should be under the charge of one fireman. Would the size of the district make any difference—the distance he had to travel?—Yes, some difference.

30060. Could there be any rule made defining the area which one man should superintend?—I agree that it would be difficult to define the area.

30061. It would have to be left to the management in some way to decide that?—Because the length of roadway to be travelled may be great, and the area of coal face small; the length of coal face may be large, and the roadways to be travelled not so great.

30062. That is so; so that it is very difficult to fix an area?—It is very difficult to fix an area.

30063. It would have to be left more or less to the discretion of the manager that the area should not be too large?—Yes.

30064. With reference to timbering, you have made, if I may be allowed to say so, some very extraordinary statements with reference to the timbering in Lancashire—that all sorts of rubbish from broken tubs are sent down. Do you present that to the Commission as a fair statement of the condition of things in Lancashire?—I present this to the Commission as my experience, that in the whole of my 11 years' experience at the coal face—and it is conveyed to me as being the present condition of things—it was extremely difficult to get timber suitable as caps or lids, and that it is customary to send the old timber down from the surface for covering timber.

30065. I will not ask you to give me the name now, but will you give to the Secretary the name of any colliery where that state of things exists at the present time. If you give that name to the Secretary afterwards it shall be enquired into. You do not like to give the information publicly, I daresay, but will you tell the Secretary where this state of things exists which you complain about. You are aware of General Rule 22, no doubt, which provides "Where the timbering of the working places is done by the men employed therein, suitable timber shall be provided at the working place, gate-end, pass-bye, siding, or other similar place in the mine convenient to the workmen, and the distance between the sprags or holing props where they are required shall not exceed six feet or such less distance as may be ordered by the owner, agent or manager."—Yes.

30066. In Lancashire the general custom is that the timbering is done by the workmen?—That is so.

30067. So that there is an obligation in Lancashire that suitable timber shall be provided at the working-place, gate-end, and pass-bye by the management. Now in the Special Rules in force in Lancashire there are also certain provisions with reference to the timbering. I think you will find those provisions at Special Rule 47 in the Lancashire Rules: "Where the timbering of the working places is done by the workmen employed therein, every miner shall by himself or his drawer take his own timber and other materials from the far end siding or the place whence he or his drawer takes away his empty tub, except where the timber cannot be taken thence in or on the tub. He shall secure the roof and sides of his own working place, and should he be unable to do so, or to procure suitable material for these purposes, he shall cease working, leave the place, and at once report to the Underlooker or Fireman. In pillar and other working, before commencing to move pillars, the roof and face shall be made secure": and so on. Do you say that these rules, both so far as they have to be observed by the management and have to be observed by the men, are deliberately set at naught in Lancashire—that neither does the manager find satisfactory and sufficient timber, nor does the workman see that his place is secure, or, if it is not, leave his work?—I say that owing to the long drawing and the difficulty of taking timbering in, in the first place, a sufficient supply of suitable timber is not constantly provided.

30068. Then I will ask you to be good enough to give to the Secretary the names of the places where you say this state of things exists?—I say that it is pretty general.

30069. Very well; we will make no mistake about it; that is to say, that the law obliging the management to find suitable timber is disregarded in Lancashire—not carried out?—As regards some timber, particularly lids and caps.

30070. We must have this matter clear, because when these views of yours are read in Lancashire, I am sure they will cause consternation amongst the managers there, and amongst the inspectors too, I should think. I want to know whether your view is that these rules as to timbering, the rule obliging the management to find sufficient and proper timber, and the rule obliging the man to leave his work if he has not got sufficient timber to put up, are disregarded in Lancashire?—I do not say they are disregarded.

30071. Then what do you say about it?—What I do say is that as regards lids and caps there is a difficulty in getting suitable timber provided of that kind.

30072. Now will you give the names of the collieries and let us inquire into it as to what difficulty there is?—I will give you the firms.

30073. I do not want you to give the names now; you can give to the Secretary the names of the firms where this difficulty exists. Is it only in providing lids and caps, or is it generally in regard to the supply of timber?—I cannot give you cases where there is a scarcity of props and bars and that kind of thing. My evidence is largely concerning lids and caps.

30074. Then what was that story which you were telling us about hundreds of yards that timber had to be dragged, and that the place was not big enough to get it through, and that sort of thing?—It is not an uncommon thing for colliery roads to be so low that the timber cannot be taken.

30075. In what colliery is it the case that the roads are so low that the timber cannot be taken up to the face?—You cannot take it on the tub.

30076. That is from the gate-end or pass-bye?—Yes—from the shunt.

30077. Then what do they do there where they cannot get it on the tub?—The drawers drag it in.

30078. Are there many cases of that sort?—Yes, I can tell you of places where that has obtained.

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30079. Are there many cases of it?—Well, I cannot speak for the whole of the county: I can only speak for the area in which I move.

30080. Take the area in which you work: are there many cases of that sort?—The complaints to me are fairly plentiful.

30081. I will ask you to give to the Secretary the names of the particular collieries where you say this state of things exists, and it shall be inquired into. You consider that the way to get a man thoroughly competent is for him to work at the face?—To be fully competent, yes.

30082. And therefore the man who works at the face knows better how to set timber than anybody else, I suppose?—Yes, I think he knows better than anybody else.

30083. Then it follows that the man who can best look after his safety is the collier at the face?—Yes: I think the man actually working at the coal face knows best how to timber his place.

30084. And therefore he is the best man to do the timbering at the face?—Yes, I believe that to be so.

30085. So that what you want is that he should be better looked after to see that he does this timbering?—Yes: I think there ought to be closer visitation and supervision.

30086. That is all—that he ought to be better looked after. He is the man who can do it best, and what you want is that there should be more firemen to look after him to see that he does his duty. That is your suggestion?—Yes, in a measure that is.

30087. What else is there: you say "in a measure"?—I think that some portions of the timbering might be done by persons provided by the employer, say as to barring the road.

30088. But I thought we had got it that the man who can do it best for his safety is the collier himself?—So far as spragging the coal face and timbering in the immediate vicinity of the coal face is concerned.

30089. Is there any danger to the collier from the immediate vicinity?—There is oftentimes danger in the drawing road approaching the coal face, and along the coal face.

30090. Then why should you put that in less competent hands?—I do not say they would be less competent hands altogether.

30091. You and I have agreed that the collier, the man who is working at the face, is the man who can best secure his own safety. Why should it be deputed to someone else?—The setting of bars along the coal face and the setting of stacks, and putting of packs, may be given out to other people.

30092. Why, if he is the man who can do it best?—He should only be responsible for the immediate coal face he is working at.

30093. Why should he not be responsible for the other?—For the simple reason that he would not earn any wages at all oftentimes if he was responsible for the whole safety.

30094. It is not a question of safety: it is a question of wages, is it?—If he has to pack his place and to timber his place, he will have no time for anything else.

30095. Does he get any wages now?—Yes.

30096. How does he manage that?—He manages it by getting the coal.

30097. And he manages to keep the place safe, does he not?—Yes, the immediate coal face: but there is always sinkage coming on after him, and if he has to turn back and to repair the broken timber and to check the sinkage, then of course he is going to have a lot of his time taken up which is now spent in getting coal.

30098. (*Chairman.*) What I understood you to suggest is that a hewer at the coal face knows best how to protect himself from falls of roof and sides at the coal face, but that there are other people who are equally competent to timber a place which is not at the face?—Yes, to follow him up.

(*Mr. Ratcliffe Ellis.*) The roads are maintained by the management now.

30099. (*Chairman.*) I understand you to say that the superior competency of the hewer in putting up the timber is confined to the putting up of the timber at the working face, and not to preventing creeps, and so on, further off?—Yes.

30100. (*Mr. Ratcliffe Ellis.*) I will ask you about that. Who are these persons to whom the work is to be transferred from the collier?—Timbermen employed by the company.

30101. Men who have worked at the face?—Yes, so far as possible.

30102. You do not mean to say that all the timbermen have worked at the face?—The majority of the timbermen have worked at the coal face.

30103. There are scores of expert timberers working on the roads who have never worked at the coal face at all?—And there are a large number who have, but who have become, say, over 50 years of age, and have gone to what we call day waging.

30104. But there are a great many men working on the roads who have not worked at the face at all?—Yes.

30105. And who are expert timberers?—Yes.

30106. I will leave the question of the timbering for the moment. With reference to the lamps, do you again think that the complaint which you made is general in Lancashire, that either from defective oil or by reason of not being properly attended to, the men cannot make light out of the lamps?—I cannot speak of it as being general: I can only say that at some of the collieries in the area in which I move, complaints have been made, and I have repeatedly been on deputations to try and get it made better.

30107. Perhaps you will at the same time give the Secretary the names of those collieries where complaints have been made as to the lamps?—Yes.

30108. With regard to shaft accidents, you have mentioned the Fogg's Colliery accident, where unfortunately a number of men were killed?—Yes.

30109. Do you know that there are safety catches there?—Yes.

30110. Why did they not stop that cage going down the pit?—I think that has not been completely brought out by the inquiry. I cannot say.

30111. I am not suggesting this because I know anything particular about it: perhaps I do not know as much as you do: but might it not be because these safety catches came into action when they were not required?—I can hardly say that.

30112. You know that is a danger?—There is a danger of the catches gripping if the chains become slack.

30113. There is a danger of their coming into action when they are not required?—There is a danger.

30114. However, in that case where that accident occurred, there were safety catches?—Yes.

30115. I think you have already said with reference to the speed, that it is the invariable custom in the County that men are not wound at the same speed that coal is wound at?—That is so: speed is reduced generally.

30116. Have you anything to suggest now so far as Lancashire is concerned—we will confine it to the County of Lancashire—with reference to the winding?—No: I think the winding is well done in Lancashire.

30117. With reference to the haulage roads, you have suggested that men should travel by the return air-way?—Yes, so far as possible.

30118. Is that a desirable thing? That is where all the foul air and the gas, if there is any, is to be found, is it not?—Yes, but while travelling in and out I think it is preferable to travelling on a main haulage road.

30119. You think you would advise in the interests of safety that they should travel on the return air-way?—The men have to live in that atmosphere during much of the whole day.

30120. I am only putting it to you that you think that would be so?—Yes, I think it would be much safer to travel on the return air-way.

30121. (*Mr. Smillie.*) If it was at the same time the haulage road?—Yes.

30122. (*Mr. Ratcliffe Ellis.*) You must remember they are not living in it all the day: there is fresh air coming to them in the face. They are not living in the return air-way all the day, or in any air like it?—No, I do not say they are living in it exactly.

30123. However, I take it from you that in your view that would be desirable. With regard to runaway tubs we have rules in Lancashire: there is Rule 18 of the New Rules that were established, which provides: "Where

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the manager directs the 'trailer' or 'devil' must be attached when the full load is drawn against the incline by means of a single rope, or single chain, other than a lashing chain" ?—Yes.

30124. Do you want anything better than that except perhaps you might have it instead of "Where the manager directs" that there should always be this "trailer" or "devil." Would that meet your view ?—Yes: I think where tubs are drawn up in that way there ought to be either a "devil" or "trailer" on in any case.

30125. And that would be sufficient ?—I think in motion roads there ought to be axle catches as well on the full road side.

30126. Well, whatever might be desirable, everyone wishes to stop these runaway tubs if they can stop them, and whatever contrivance you suggest as being advisable that ought to be used ?—Yes, that is the idea which is to be conveyed.

30127. With regard to a Coroner's Jury, did you ever hear of a Coroner's Jury wanting to go down a pit ?—No, I have not.

30128.—And you do not think it is a great grievance to them at present ?—Not so far as they are concerned.

30129. So that you would not advise any alteration in the law so far as that is concerned ?—I think it is essential that a Coroner's Jury should see the scene of the accident in order to assist them.

30130. Would you make it obligatory that they should go down whether they liked it or not ?—No: I think they should be left to express the desire to do so, or that they should be ordered to do it say by the inspector if he thought it was necessary, or by the Coroner himself.

30131. Now we will go to the Special Rules. Is it your view that before a Special Rule is made, or is proposed, both the employers and the workmen should meet and discuss it ?—Yes, I think that is advisable.

30132. If they do not agree, is it not to be proposed ?—Well, I do not know, if they do not agree.

30133. That is what I want to put to you. What is to be done then ?—I should say the inspector for the district would be the best person to decide, if they do not agree.

30134. At the present time the Home Office have a right to propose a rule ?—Yes.

30135. Would you say that they should not have a right to propose a rule until it had been discussed by the workmen, and the workmen had agreed to it ?—I think the workmen ought to have an opportunity of expressing their view about it.

30136. I want to know what is the scheme, and I should like to have your answer to that question. The Home Office now have a right to propose a rule. Would you say that they should not have a right to propose a rule until they have invited the men to discuss it, and there had been an agreement that it should be proposed ?—Well, it might have to lead up to the Home Office having to insist upon a rule being put in force, although the body of the men to whom it applied did not see quite the same way with regard to it.

30137. Will you answer my question ? You say the employer should not propose a rule unless he invites the men to discuss it with him in the first instance. Do you say the same with regard to the Home Office—that they should not propose a rule until they have invited the men to discuss it, and there had been an agreement that that rule should be proposed ?—No. There must be finality somewhere.

30138. Can you give us an idea of what should be done if a meeting is called and the employer says, "I wish to propose a rule." Supposing we wanted to propose a rule, say, in Lancashire, and I said to you, "Now, Mr. Twist, I want you to discuss this with me," and then we could not agree, is not the rule to be proposed ?—I have not gone into that point.

30139. Do you not think it is important before you make these suggestions, that you should go into it and think the matter out ?—It requires consideration.

30140. (*Chairman.*) There is one question about Special Rules which I should like to ask. Do you suggest on the part of your Federation that the men should be allowed to propose Special Rules to the Home Office ? Supposing the men have come to the conclusion that a Special Rule is desirable, would you allow them to send in to the Home Office an application that that Special Rule should be proposed ?—Yes, I think they ought to have an opportunity, as well as the employer, to propose Special Rules, as well as to take part in *discussing* those proposed by the employer.

30141. (*Mr. Enoch Edwards.*) I think you stated in answer to his Lordship that you were appointed by the Lancashire Miners' Federation ?—Yes.

30142. And that the expression of opinion you give us here with regard to the Government inspectors would apply to the Miners' Federation generally ?—The Miners' Federation, as a whole, of Great Britain.

30143. As to the inadequacy of the number of inspectors ?—Yes.

30144. You perhaps have seen the Bill that was drafted some time ago by the Federation—the Amended Mines Bill for Inspectors ?—Yes.

30145. And the conferences have repeatedly suggested that there should be one inspector to 10,000 work-people ?—That is the number the Bill prescribes.

30146. Have you given much consideration to the size of the districts that they have now as inspectors ?—Only to the Liverpool and North Wales.

30147. To Lancashire ?—Yes.

30148. It necessitates a considerable amount of travelling for the inspector to get round with his work ?—Yes, it is a long distance, of course.

30149. If there were more districts created and more inspectors, you would get more service and less travelling ?—Yes.

30150. I mean as to the assistant inspectors, or the special inspectors to which you direct attention, what is termed rather "working men inspectors" ?—Yes.

30151. Mr. Ellis asked you with reference to a certificate of competency, and you suggested a second-class certificate ?—Yes, for some inspectors.

30152. Still they would be inspectors ?—Yes.

30153. They need not possess the same technical knowledge as the chief inspectors ?—No.

30154. The trend of your evidence is that you want inspectors more in the mines who practically understand the mine ?—Yes.

30155. And the dangers of a mine ?—The men who have a technical knowledge sufficient to secure a second-class certificate, and who, in addition, have had a large experience to make them good men for that purpose.

30156. That is what you mean ?—Yes.

30157. That is what you mean when you suggest one of that class for 10,000 men. That is the type of man you mean ?—Yes.

30158. I am trying to see whether you put the same interpretation upon it. This type of new inspector that we are desirous of creating must be a man of practical knowledge, but not necessarily a high technical training as a first-class inspector ?—That is what we believe.

30159. That his time should be spent in a pit ?—Yes.

30160. Largely now his time is taken up with clerical work and travelling ?—Yes, attending scenes of accidents and coroners' inquests.

30161. (*Chairman.*) Would you have another class, in addition to the class of sub-inspectors and in addition to the working men inspectors, attached to particular mines to go round under Rule 38 ?—Yes. I think it should be left optional to the men in addition to the sub-inspectors to appoint a man to go round.

30162. (*Mr. Enoch Edwards.*) We have the chief inspector and assistants. We are rather directing attention to another class of men who would be below the assistants ?—Yes.

30163. The assistant inspectors now appointed are men who hold first-class certificates, and many of them possess high qualifications ?—I should say they are practically as qualified as the chief inspectors.

30164. You suggest that these men should be drawn largely from the practical type of men who understand mining through and through ?—Yes, that is the idea of the Federation.

30165. When you express an opinion about winding and the speed of travelling, it has been made clear since that all pits wind men at a less pace than they do coals ?—There is a reduced speed.

30166. Did I understand you to say in Lancashire that they would have coal in the cage in the lower decks while drawing men from the opposite cage ?—At a few collieries. That is not general.

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30167. Are you aware an opinion as to the wisdom of it was expressed by a Government inspector many years ago?—Yes, I believe as far as I recollect the opinion has been expressed that it helps to steady the cage, and there has been the other opinion expressed that it ought not to be so.

30168. Generally colliery companies do not do it?—Generally colliery managers see that the cage is free from tubs.

30169. Mr. Cunynghame was not here when I tried to get at what you meant by the scotches in wagons. Do we understand there that that would be on a level where the gradients are up-brow?—Up-brow.

30170. Men are simply called on to push the empty tub up, but they must locker it down with a locker?—Yes, that is so.

30171. What is the objection to putting in a jig?—I see no objection other than that of having to keep a wider road open if they do put a jig up.

30172. If you were working mines such as I have had experience of in North Stafford, you would have to put a jig up because the gradients are so sharp. They do not do it while men will locker the wagons and take them down?—Wherever men can hold a tub down with two lockers in they are generally expected to do it, and it is only in the rarer instances that a wheel or a balance or a jig is provided.

30173. It seems rather a clumsy method of getting coal, to expect a man to push up a heavy gradient much of a distance where they could put a jig in. Is that the practice generally?—Yes, and it involves a tremendous amount of labour.

30174. It must, and the objection to it is very strong. Apart from the risk, is it pushing empty wagons?—Nearly every price-list gives extra payment because the brows are counted double distance for long drawing. It is so general because full tubs are pushed up and come down lockered.

30175. Have you had many accidents in these cases?—There are a few happening each year. I have known accidents.

30176. The man starts away and does not get his lockers in?—Yes, sometimes he may get a tub with the wheel turning loose on the axle, and the locker does not act, and then it goes away.

30177. You stated that the feeling of your men in Lancashire, or your Federation, rather, is against fines in the colliery office?—It is distinctly against fines.

30178. And that they would prefer that men should be prosecuted in court?—That is the opinion of the Federation.

30179. I suppose many of those fines are fines inflicted under the Coal Mines Regulation Act for matters not affecting the safety of men, but for such matters as filling dirty coal, and things of that kind?—The majority of the fines are for filling dirty coal.

30180. They hardly touch the business of this Commission, which is inquiring into accidents in mines?—Very few, as far as I know, of the fines are inflicted for the workmen's neglect to timber, sprag or prop. Usually if that is done the management give the man no option: they take him before the magistrate.

30181. To what extent are the men parties to these fines in the colliery office? Have you any idea of the general feeling of the men? Do they prefer to pay a fine quietly in the office to being prosecuted?—I should say that the majority of the men would be against fines. That is declared through our lodges and by the resolution of our Federation. There may be a few instances, and no doubt there are, where men prefer to be fined rather than to be exposed.

30182. If it is a question of discipline in the pit and the interests of safety, your men agree it is important that they should be prosecuted where they can defend their case, as stated, rather than be fined in the office?—Yes. The opinion of the Federation is this: if a man is guilty, then it is much better in the interest of safety to prosecute him, besides its having a deterrent effect, and being a warning to others.

30183. The fines you suggest are not fines that apply to the safety of the mine, but simply a matter of carrying out contracts, largely?—Yes, largely.

30184. There is a matter Mr. Ellis was putting to you and I should like it to be clear on the notes. With reference to the clause relating to workmen's inspection, he suggested if a man worked five years in a mine and was out of it for 20 years, that he would be a practical man. Is that a practical man?—I do not think he can be described as not being a practical man, yet he is not so efficient and up-to-date as a man who has so recently come from the coal-face.

30185. You would not think yourself, in the interests of safety in mines, that it would be a proper thing to take a workman out of a pit for 25 years, who has never seen the change that has taken place, and say that he was a practical miner?—I should advise against such a man's election if he were a candidate.

30186. You would rather suggest that any law should not leave it open for a man to be appointed who for 25 years had not seen the inside of a pit?—I think in the interests of all concerned it would be wiser to stipulate a time limit as to his absence from the mine.

30187. When you suggest that the firemen in Lancashire are not fully competent, you mean by that that they have not had this working face experience?—That is what I mean.

30188. You do not mean more than that?—I do not mean more than that.

30189. You and your colleagues believe that a man should have some knowledge of a working face before he is appointed a fireman?—As the fireman's work is largely to control and direct the collier, we believe it is essential that he should have coal-face experience.

30190. And to be in a position to advise he must have had experience of what is meant by the ever-changing scene of a face?—Yes.

30191. With all its technique and difficulties?—We fail to see how he can intelligently direct a man of experience at the face unless he has had that experience himself.

30192. The question, of course, of area Mr. Ellis asked about to get your view as to it. In taking the number of men over which a fireman is appointed, due regard should be had to the area he has to travel?—Yes.

30193. A fireman might effectively have supervision over 100 men in some circumstances, and more effectively than he could supervise 50 men under other circumstances?—That is so.

30194. That, as a matter of management, would have to be defined. As yet we have no practical suggestion. You were asked what would be your suggestion. Would it not be one of the duties of these sub-inspectors to direct the management that there are not sufficient firemen in a particular area, and that more should be appointed?—I think a complaint from the inspector to the management that a particular district was not being properly supervised on account of the area being too large or the number of firemen being too small, ought to receive attention.

30195. The area may be too large, and the work may be too highly technical. It would be easier in some pits for the men to get about themselves. Where you have sharp grades you want more inspectors?—Yes.

30196. You could not state the number of persons who should be employed in a particular area. Some authority ought to decide whether it should be left absolutely to the management to say whether sufficient were employed or not?—I think the inspector should have the power to exercise, say some advisory power——

30197. At any rate to be able to suggest that in his judgment there were not sufficient firemen?—Yes, that there were not sufficient firemen.

30198. With reference to new Special Rules. Mr. Ellis put it to you as to whether coal-owners should be in a position to propose a new rule and send it on to the Home Office without consulting the men, and I understand you object to that?—Yes; we think that the men ought to be consulted before it is sent on.

30199. He said ought not the Home Office to have the power themselves to suggest rules, and I understood you object to that?—No, I do not object to the Home Office suggesting rules, providing they have the consideration of the men at the same time as the employers have the opportunity of considering them. If they are suggestions I do not mind, but if they are mandatory I am opposed to them.

30200. In your judgment neither employers nor the Home Office, either separately or both of them, should proceed with these rules, without first consulting the men?—That is what we believe. We think they ought to be consulted, no matter from what source the suggested rule originates.

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30201. The Home Office often has a suggestion of the Government inspector, and usually of course the company. You say if they are agreed, first of all before anything is done at all, the workmen should be consulted about it?—Yes, and any objections the workmen see fit to make, or any suggested alteration, they should have an opportunity of making before the thing is posted up and left for them to object to as at present.

30202. (*Mr. F. L. Davis.*) In answer to Mr. Edwards just now you said that there ought to be a time limit, some time fixed after which you would not appoint a man as a working mine inspector under Rule 38. What would you suggest as the time?—I think a man may have been out 10 years and yet be an up-to-date man, be a sound practical man and have in no way lost any knowledge that he had, or failed to keep pace with mining developments.

30203. Would you be in favour of suggesting 10 years?—Yes, I should.

30204. Up to 10 years he would be eligible as a practical man?—Yes.

30205. But not after 10 years?—No; I do not think it would be wise to go too far, having regard to getting efficient and up-to-date men.

30206. You told us in answer to somebody earlier in the day how long you had been working at the face. How long is it since you gave up working underground?—It is between eight and nine years.

30207. Mr. Ellis had a number of questions to ask you about the firemen, but I have only one or two. You say in your proof that the men in some of the most important respects are incompetent, that is firemen. Has that come under your own experience?—Yes, I know men who have been appointed to this position that both from the standpoint of knowledge of gases, ventilation, timbering and coal-getting, have not the necessary experience, according to my view, to make them competent men to discharge duties of that kind.

30208. Did that happen when you were working in the mine, or since?—When I was working, and since.

30209. You must have been very uncomfortable, I should think, when you came to the conclusion that these men were not competent, especially when you were working in the mine?—I can assure you often experienced colliers do not feel that some of the firemen are competent to advise them.

30210. If that were the case, and these men were not competent, you and all the other men in the pit must have been in a very unsafe position, or feeling uncomfortable, and possibly in danger?—You rather trust to your own desire to keep yourself safe in that case, and you satisfy your own conscience and mind you are safe apart from any advice the fireman may give.

30211. I do not know whether you are limiting his incompetency to looking after timbering, but if you have an incompetent fireman you may be allowed to go to work when it is not safe, so that you cannot help yourselves then.—I think a fireman ought to pass a lower grade examination, giving evidence of some knowledge of the properties of gases and what they are calculated to do, and some knowledge of ventilation as well as timbering.

30212. Did you at any time draw the attention of the inspectors to what you believed to be the fact, that these firemen were incompetent men, and that you and your fellows were in danger?—I have not personally called the attention of the inspector to the fact of any incompetent person having been engaged.

30213. If, as you suggest, it is such a serious thing, do you not think that you should have done so, not only for your own safety but for the safety of others?—I cannot say that the firemen complained of did actually move in the district which I worked in, but they worked in the same mine or in some pit of which I had knowledge.

30214. I put it to you, if it were as serious as you make out in your proof it was, it would have been your duty to draw the attention of the inspector to it?—Many things might be reported which men do not report because there is a fear which hangs about the men that if it should be known they have reported anything to the inspector it would go badly with them.

30215. From what we have heard from the inspectors I do not think we can pay any attention to that at all?—Not from the inspector, from the particular fireman objected to, or the employer under whom he is engaged.

30216. I say from the evidence we have had from the inspectors themselves here that does not apply at all, because they say they get no end of anonymous complaints or information?—That may be so, anonymously, but still at the same time there is the fear that the anonymous letters will develop ultimately into having to face the thing.

30217. I put it to you, if I were in your place and I felt, as you say, that these men were incompetent men, and that you and your fellows were in danger, I should have sent an anonymous communication to the inspector. As you did not do so I should suggest that the position was not as serious as you try to make it out to be?—I can only say that the fact that anonymous letters go, to me is evidence that the men fear to append their own names to them.

30218. I am not on that point as to whether the men fear it or not. They need not append their names. The inspectors tell us they get anonymous information from the men?—Yes.

30219. You tell us there are very many incompetent men, and that you and your fellows have been in danger, and yet you have never informed an inspector of the conditions under which you were working?—Personally, I have not.

30220. Very well, I will leave it at that. You made use of the expression that you would be in favour of one manager one pit?—Yes.

30221. You consider that there may be two or three or more pits close together employing a very few men as compared with many pits, say a couple of hundred men each. Would you then think it necessary that each of those pits should have one manager appointed?—I think you will notice in the *précis* I sent in we state we are further of opinion that certificated managers should be limited to a certain number of underground work-people. Having in view the fact there may be very small collieries with very few men in, as an individual pit, it may be under such circumstances permissible for a man to take more than one shaft, but in large collieries employing 500 or more people underground, we certainly believe that there ought to be put over that one pit one manager to have proper supervision.

30222. My complaint rather is you have laid down very wide regulations in certain directions: you have said this. You said you would have one manager one pit. We now see that it might be advisable to have one manager over two or three pits?—If there is only one pit and say 100 or 50 men employed, then I think the law requires even there that there shall be a certificated manager, if there be only one pit.

30223. I agree, but the manager may be appointed manager over two or three pits together with a small number of men?—Yes. To us the danger is at present the tendency of putting one manager over more and more pits. That seems to be the tendency at present.

30224. Against that you said one manager one pit. Now you rather limit it to the number of men than to the pit?—Yes, I should prefer to limit it to the number of people underground than to one individual shaft.

30225. I think I understand that now. With regard to your proposal that there should be separate travelling roads, what experience have you had outside Lancashire and Cheshire. Where have you worked?—I have had no experience outside Lancashire and Cheshire.

30226. You say that, not knowing how it would affect say, Wales or any other district?—I cannot say as to how it would affect any other district.

30227. Have you had any experience in mines that use naked lights?—No, I have had no experience of them.

30228. Without having had any experience you still say that safety lamps should be used in every colliery?—Yes, that is the belief and feeling of our Federation in the matter, that there ought to be safety lamps used.

30229. Do you think you have mentioned everything you think might be an improvement in the new Coal Mines Act?—Perhaps not, only that the statement sent on to us was dealing with the matters here referred to.

30230. I mean from your own experience and from your own knowledge of your own district?—I do not know anything else that at the moment I can call attention to.

30231. I think you have mentioned quite enough. I did not suggest that there were lots of things left out.

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30232. (*Mr. Smillie.*) You are aware that Section 21 deals with the position of the certificated manager: "In every mine required by this Act to be under the control of a certificated manager, daily personal supervision shall be exercised either by the manager or by an under-manager nominated in writing by the owner, or agent of the mine." Could you let us know what daily personal supervision really means in Lancashire? Does it mean that the manager must be every day on the ground and that the workmen underground must be daily under his personal supervision?—Whatever it may mean, that is not the fact.

30233. I am not dealing with what the law means. How is that part carried out in Lancashire? Is each pit of a mine under the daily personal supervision of a certificated manager who is responsible under this section?—No, as far as my experience goes it is not.

30234. Your point really is that where the mine is under the control of the manager he should give daily personal supervision to that mine, and that that is impossible if he has six or seven mines under his control?—I think it is essential that a manager should be able to get over the area of his collieries and workings over which he has charge at least once a week, and that cannot be done with one manager to five or six collieries.

30235. Is this rule sometimes interpreted to mean that if the manager is at the top of the mine once per day that is daily personal supervision?—If he is at the surface of the mine or goes down to the pit bottom and comes up again I rather think that is felt to satisfy the requirements of the law.

30236. You want something more than that?—Yes, we want direct supervision and direct touch with the workings over which he has charge.

30237. In answer to Mr. Davis you said that there should be a certificate for firemen to prove that they are competent. It would be a partial proof at least of their ability if they held a certificate for which they had to pass an examination?—I think there ought to be a lower grade certificate.

30238. A certificate of some kind?—A certificate at least to give evidence of competency as regards gases, ventilation, and timbering.

30239. The law at present lays down that the manager shall appoint a competent person?—Yes.

30240. There is nothing to guide him as to whether or not a person is competent but his own knowledge of the person, or his statement from him that he has held a position of that kind before?—Yes. As it stands the manager exercises his discretion and judgment in the appointment of the man.

30241. You suggest not always, I think, very wisely?—In some instances not wisely to my mind, and according to my view.

30242. You are anxious to limit the area which you would have under the control of a fireman. You are not sure whether it should be area or number of men, but whether it is the one or the other, they should have sufficient time to have personal control of the workmen under their charge, and visit them more than once per day in addition to the morning?—Yes. I think the fireman ought to be able to visit every workman and spend sufficient time with him to give him any advice necessary, and properly examine his working place at least twice per shift.

30243. Do the regular firemen in Lancashire who have charge of the districts do anything else than make their morning examination and their second examination, and attend to the ventilation? Have they other duties sometimes outside of that, such as looking after the material being sent out to the bottom, or is their time wholly devoted to looking after ventilation, timbering and other things?—I cannot speak positively, but in some instances firemen may be called upon to take charge of, say, the haulage, or in some respects be responsible for the output of coal out of their district. They are held in some respects responsible for there being a satisfactory output from their district, according to the mind of the manager.

30244. You cannot say definitely from your own knowledge that applies to some of the collieries in Lancashire?—I could not cite a case.

30245. There would be little use limiting the area if the fireman put on were to be in charge of getting the material out of a certain section in addition to doing their work?—I think his duty should be confined to the ventilation, to the timbering, and to the safety of the men at the coal face and in the roadways, apart from the main haulage road.

30246. That should be his whole duty?—Yes.

30247. Do you think that would tend to greater safety underground if that were so?—I believe so.

30248. You are aware that a colliery manager cannot take full charge of a mine as a manager unless he has a certificate of competency which he has gained by examination?—That is so.

30249. Supposing he has gained that 20 years ago and has not practised as a manager, he would still be entitled under his certificate to take a place as a colliery manager to-day?—Yes, I think he would: I do not see what would prevent him. His certificate would be his passport.

30250. You would not expect any employer or mine owner would be likely to employ a person who had not been employed for 25 years on any shaft, although he held a certificate?—I should not think he would.

30251. Do you think employers are less intelligent than miners in that respect? Do you think the miners would be likely to employ a person to examine a mine who had five years' experience in a mine 25 years ago?—I am certain they would not appoint such a man.

30252. Is there any use making a provision that a person should not be appointed who had not been more than 10 years out of a mine? Could you not leave that to the good sense of the men?—I should personally be willing to leave it with them, but a stipulation to prevent anyone being appointed would seem to me to be an essential barrier.

30253. You would not lay down the same stipulation with regard to certificated managers?—I should apply the same sauce to the goose as to the gander.

30254. It does not apply at the present time?—No.

30255. It was felt there would be no need for it, as the employers would not be so foolish as to do a thing of that kind?—I should expect they would not.

30256. With regard to timber, I think your point is that the owner should be responsible for placing the timber at the working face?—Yes, we do believe that.

30257. Is that the opinion generally in your county?—Yes.

30258. That the owners should be responsible for placing the timber at the working face?—Yes.

30259. At the present time it is customary in many parts of your county for the workmen to convey their material a considerable distance from the coal face to the lie or pass-bye?—It is almost universal.

30260. In those cases they are responsible for bringing the material from the lie into the working face?—That is so.

30261. Is the opinion of your men that the employers should be held responsible for having the timber at the working face or the nearest possible place to the working face where the timber can be kept without danger?—The opinion is that the timber should be conveyed by the manager as near to the coal face as can with safety permit of the timber being stored.

30262. With regard to winding workmen, you have stated once or twice that the rate at which workmen are wound is considerably less than coal. Is there any complaint in your county, in addition to the rapidity of the winding at the pass-byes, that sometimes workmen are lowered immediately from the surface for the first 20 or 25 yards more rapidly than is good for them?—Yes, there are individual cases where men are dropped down too suddenly and brought up too rapidly, but speaking generally the speed is reduced, but not so much as we should like.

30263. You have no complaint as to engine winders because of the greater hurry now in getting men up and down, and lowering the first part of the distance at such a rate as injures their nerves, and probably their health?—One has heard at times of pressure being brought to bear, and officials timing as to how long it took to wind a wind of men.

30264. Dealing with drawing roads, you stated here that sometimes the gradient was from 1 to 10, to 1 to 4?—Sometimes 1 in 3—3½.

30265. Drawers have to bring out the full tubs down those roads. Is it possible they can hold them with even two sprags in down those roads with safety to themselves

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Mr. H. Twist.

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or anyone coming up the road? Can they hold them from running away very often?—Very often in those brows once the man has started with the box he could not stop it till he got to the bottom.

30266. Persons might be coming up at the time, and the road is so narrow that they could not get to the side?—I have been caught more than once.

30267. It is impossible in many cases for a man to stop his tub?—If a man hears another man coming, he will throw his empty tub off in order to stop the progress of the full one.

30268. That is a special danger of itself?—A very particular danger in Lancashire.

30269. You know the Special Rule which prevents a person going in front of a tub?—Yes.

30270. On some of your roads you would require almost two persons to hold a tub down at your brows?—There are many gradients where it requires two.

30271. Are you dealing now with longwall workings?—Yes; and straight workings, too.

30272. In every case the road is sufficiently wide to have a double road if it was kept at that width?—In every case.

30273. It is only a question of keeping to that width to provide for safety as far as that is concerned?—No roads I know are driven less than 7 ft. wide.

30274. That would be sufficient for the double road which you refer to?—Yes.

30275. We have different names for the method of hauling. You stated that the road on which was the big balance, or the small tub containing dirt or metal, would only require to be half the length?—Yes.

30276. Did you mean half the width?—No, half the length.

30277. Does not the rope merely go round the wheel at the top?—It runs double on the dobbing side.

30278. You have two ropes, as it were?—No, one rope. *This* is the box, *there* is a revolving wheel on the dirt box; *here* are two props, and the wheel round.

30279. There is a revolving wheel on the front. The end of the rope is not attached to that box?—No, it is past there (*indicating*). It revolves round that wheel and round *this*, and *this* runs at only half the speed of *this*.

30280. I see the point. You complain of some of your workmen requiring in some cases to go home from bad light caused by bad oil or deficient lamps?—It is usually the bad quality of oil we have to complain of.

30281. Do your workmen in some cases pay for the use of the lamps and the oil?—In all cases that I know of.

30282. In all cases they pay a certain daily or fortnightly allowance for oil?—1d. a day, or 6d. a week.

30283. And for the use of lamps?—Yes.

30284. Have they any voice as to how those lamps should be kept, or the choice of the oil?—No.

30285. The money which they pay is sufficient to keep up the lamps and pay for the oil?—It is very often more.

30286. You have the right to audit the accounts to find out whether they pay more or not?—Yes.

30287. You have no voice as to choosing the kind of oil or the class of lamp?—Neither the lamp nor the man that cleans it.

30288. You have to depend on the employer to do that although your people pay for the up-keep, and all that?—Yes.

30289. Is it likely that the workmen in a case of that kind would complain to a mines inspector, and call attention to bad oil—I mean an individual workman concerned?—He would prefer to make his complaint first of all to the officials.

30290. Officials of the colliery, or officials of the organisation?—Both of the colliery and of the organisation.

30291. You could conceive a case where complaints were made to the agents of the organisation and the attention of the mines inspector being called after having referred to the manager of the colliery?—We should prefer to see the management, and if we could not get it remedied, we should feel it was advisable to acquaint the inspector.

30292. I am very much concerned as to the question of the inspectors, and I have not yet grasped exactly your position. With regard to what is called the third grade, there is the chief inspector and the assistant inspector. Would the third grade be a lower grade than the assistant inspector?—Yes.

30293. Have you any objection to that class of inspector holding a first-class certificate?—Not in the least.

30294. He would require to make the ordinary inspection of the mine, and he might require to make suggestions to the colliery managers if he found anything wrong?—That is so.

30295. Would it not be better that he should hold a first-class certificate which would place him on an equal footing, in theory, at any rate, with the manager?—There is no doubt that it would be better, but still I should think him competent with a second-class certificate to discharge those duties.

30296. If it were laid down that he must be a practical working miner who had worked at the coal face, and that he must hold a first-class certificate, would you have any objection to that?—No.

30297. There are sufficient intelligent miners who work at the coal face holding first-class certificates to supply this want?—I know that there are some.

30298. Would not a person who holds a first-class certificate be more likely to have courtesy from the manager than a person whom he felt was below him in knowledge and theory?—If we could get a man whose theoretical knowledge placed him on the same level as the manager himself, and he had in addition to that the practical knowledge, I see no reason for objecting to him.

30299. His chief duty would not be so much to tell the manager what was wrong and put it right, as to report to the district inspector as to how he had found matters there?—That is what I take it would be his principal duty.

30300. There would be some difference between himself and the chief. The district inspector at once calls the attention of the manager to something wrong, and orders him to put it right, but the third-grade inspector might talk the matter over with the manager. His final duty would be to report to the district inspector?—That is so.

30301. The fourth-class of inspectors are under Rule 38?—Yes, that is so.

30302. You are of opinion it should not be confined to persons who are now working as miners, but opened up to persons who were or had been within a reasonable time, say ten years, working miners?—I do not see the good of excluding a man who had had practical experience, although at the moment of appointment not working at the coal face. I think it would add to the efficiency of the inspectors if men were appointed who were not engaged under some particular manager, and who depended on him for their livelihood and employment.

30303. You do not want to lay down that they must hold certificates of competency: it is sufficient to know that they must be practical men?—No.

30304. You think the Government should pay them?—Yes.

30305. Failing that, a third grade paid by the Government. If the Government refused to pay those men appointed by the workmen do you think the workmen should have a right to appoint any person they thought fit who had been a practical working miner?—Yes: I think the privilege and the opportunity ought still to be maintained and given to the work-people to appoint those persons.

30306. Have you any unskilled workmen in the mines in Lancashire, persons who have not previously been employed until 25, 30 or 40 years of age?—One has known of single instances of men being taken in the mine never having been in up to 20 or 30 years of age or more, but it is difficult to decide that, because men are migrating from one colliery to another, and you never know whether a man has had experience when he says he has. There is no means for the manager or anyone else to know.

30307. Do you mean at the coal face?—Into the mine at all, or the coal face.

30308. Is there any cause of complaint amongst the Lancashire miners as to unskilled persons working underground being a danger to themselves and the other persons employed?—The complaint is not very general, but still there is a feeling against men who have not been in the mine up to reaching mature years. There is a feeling against them going into the mine.

30309. Have you had cases in which unskilled persons went to the coal face to work, had been taken by skilled

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persons to the working face to work under their supervision ?—I could not at the moment give you names, but I have a knowledge of men having been brought into the mine after having reached mature years, but not a specific case where a man has been taken down to the coal face.

30310. If it is not a real grievance we need not follow it up.

30311. (*Chairman.*) I want to clear up one point about the inspectors. In answer to me you did not seem to object to the third-class sub-inspectors being appointed by the Government, but in answer to Mr. Ellis you seem to think they ought to be appointed by the men. What do you think ?—I think they ought to obtain their certificate of proficiency by sitting at an examination fixed by the Government, but popular election in the sense that the men appoint them.

30312. Is that the opinion of your Federation ? Have you discussed whether these sub-inspectors should be appointed by the Government or the men themselves ? Is that a matter you have thought out, or do you only give your own opinion ?—I cannot say that there has been any definite resolution passed upon it.

30313. You are hardly in a position then to tell this Commission that your Federation are in favour of their being appointed by the men ?—I would not commit the Federation to that view.

30314. It is said that the hewers do not often wish to be firemen. Do you think better men would be appointed as firemen if paid more than they are now ? Do you think that an increase in pay would increase their efficiency ?—I am sure if the money paid to the firemen was any inducement to men working at the coal face many would prefer to be firemen, but it is not sufficient. The wages are not enough, and they can get more at getting coal, so that they do not aspire to it.

30315. There are a certain number of people who do not like the responsibility, whatever the wages might be ?—Yes, that is so.

Mr. Richard Waring, called and examined.

30316. (*Chairman.*) You and Mr. Twist are equally responsible for the paper which has been put into my hands of the evidence you propose to give ?—Yes.

30317. You have heard what Mr. Twist has said ?—Yes.

30318. Is there any point of disagreement you would like to mention to this Commission ?—Not that I see. I think Mr. Twist has expressed sufficiently my views and the views of the Federation.

30319. Is there any statement you would like to make on your own account to the Commission ?—It already has been done pretty well, but as a working miner working at the coal face I would specially like to emphasise one or two points with regard to the roof and side accidents. That practically accounts for 50 per cent. of all the accidents. My opinion is that if these lids which we have been speaking about were plentifully supplied and were proper lids of the proper quality and size, and also if provision was made for duplicate timbers similar to that which prevailed in the French mine at Courrières, it would save many accidents.

30320. Do you mean by duplicate timber two props where there is only one, side by side ?—Not exactly; it would give more space for working. We would have a longer lid to put against the roof, and if *that* was the bar (*Witness here held his pencil up*) there would be a prop under either end, which would grip a long length between it, cross breaks and slips, and give more room to work in, and would be more safe. That, in my opinion, is an important point.

30321. You think that the present system does not provide a sufficient number of props ?—No, not exactly that so much as efficient material for lids and the quality of lids.

30322. (*Mr. Enoch Edwards.*) You mean rather a bar than a lid ?—Yes, I should prefer them of suitable size. I should like also to add, with regard to this lid question, that I know of mines where it is not a question of bad material being sent, but for long periods no material is sent for lids.

30323. You can mention mines ?—I have personally set props without lids when a lid would have made it more safe and kept the roof better in every respect.

30324. Have you complained that there were no lids sent down ?—To the immediate official.

30325. Did you next time get a sufficient quantity of lids ?—No; I do not say this is always the case, but it is the case periodically at every pit.

30326. You think that periodically there is a shortage in lids ?—Yes.

30327. If you know mines where that occurs, perhaps you will give the names in to the Secretary ?—Yes, but I am afraid I shall have to mention all the pits I have worked in.

30328. Will you mention some pits where they are worse, at all events, and we will make enquiries. I mean through the Secretary; I do not want you to give them to us now ?—Of course I prefer, personally, in everything in this respect that names should not be given.

30329. (*Mr. Enoch Edwards.*) Because you are working at a pit now ?—Yes.

30330. (*Chairman.*) Is there anything more you would like to say to the Commission ?—I do not think I could add anything to what Mr. Twist has said, or place it before you in a better way, but I thought that I would like to emphasise that point, because I am of a strong opinion that this lid question is at the root of many accidents.

30331. (*Mr. Wm. Abraham.*) Would you suggest a change in the system of timbering in the face of some of your workings ?—I should suggest that we should get a better stamp of lids, not exactly a change of system, but better timber, different sized lids and a good provision of them.

30332. Do we understand you to say that you would want two props and what we call a collar, a prop covering; you call it a bar. Do you suggest that you would have a right to put up two props and a bar of timber where you now put up a single prop ?—Exactly, according to the option of the man. I do not suggest that this is always absolutely necessary, but there are cases where at present it is not allowed, and in fact where we should be fined. They might warn you, but eventually you would be fined if you persisted in putting bars up under circumstances where there is a very dangerous roof, because of the cost of the timber. The management will tell you frankly that it is too expensive, that they cannot afford it, and if you do not desist after that you would probably be fined, and afterwards sacked.

30333. Where there are soft brittle tops do you have any accidents in the immediate face ?—I think the accidents are in places where there are more slips than soft roof, in my observation, slips or big breaks over long lengths of roof.

30334. You suggest where these slips are dangerous you should be allowed to put up cross timber ?—Yes, exactly.

30335. Instead of a prop and a lid, two props and a bar. Do you think that would be the safest thing to do ?—I am positive of it.

30336. That is what I thought was in your mind. Then you could put a bar across reaching from one collar to another, to help keep up this roof. That is what you mean ?—Yes.

30337. You know of certain falls of stone in these places which would not have happened had that kind of timbering been adopted ?—Yes, certainly—many.

30338. From that bar you could send an iron bar before you to the face of the coal where the top is brittle or breaking ?—That could be done. Personally I have not had any experience of that kind, but that was the system at the French collieries referred to. I have had no personal experience of that system, but I should imagine from what I have read and from my practical experience that it would be a good thing.

30339. It is not a question of complaining against anything, but in your opinion that would be an improvement ?—Yes.

30340. In your opinion that would reduce the number of accidents ?—Yes, it would, in my opinion.

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Mr. R. Waring. 20 Nov. 1907

30341. What about timbering the roads leading to the faces? Have you a system of timbering those roads?—No, it is absolutely left to the judgment of the officials with regard to where they require bars in the roadways.

30342. There is no stipulation or regulation that these bars should be put at a certain space?—No: it does not prove so in practice in my experience, and not otherwise that I know of.

30343. You are a working collier?—Yes.

30344. In your opinion a system of putting up bars, props, or chocks, at a certain distance would strengthen the roof and reduce the number of accidents from falls?—Yes, that is my strong opinion.

30345. Is there any reason given for the absence of lids?—No, except in some respects. I think at many places they have an idea that the men make shift and make some lids for themselves. I may say from my own personal experience, it being absolutely necessary to use lids, it has occupied me and it has occupied my fellow men a long time in making some sort of lid from broken props, or hunting about the place. I think the management perhaps have in mind that the men will manage somehow, and that it will reduce the cost of timber. I cannot give any other reason.

30346. You have to hunt about for these pieces of timber to make your lids of them?—Exactly.

30347. It would meet your view largely if lids or timber proper for lids should be specified among the suitable timber to be used in working places?—Yes, that is so.

30348. (*Mr. Ratcliffe Ellis.*) With reference to timbering you have had a considerable experience at the face, I believe?—Yes. Out of 22 years in the mine I have had 16 or 17 years experience at the coal face.

30349. Then you thoroughly understand timbering?—Well, I think I do.

30350. Do you think that there is anybody who can keep you as safe as you can yourself at your working face?—I think this, that with both myself and my fellow men, the pressure, which comes naturally from competition and trying to produce as much coal as possible, sometimes leads us to risk things even against our better judgment, whereas if there were more strict supervision we should be kept more generally up to the mark. We are led against our better judgment to sometimes take risks.

30351. I daresay that is so. If you exercise your better judgment do you think you can keep yourselves as safe as anybody can keep you? With your knowledge of timbering and watching the state of things round about, do you think you can keep yourselves as safe as anybody can keep you?—Probably personally I think that.

30351A. If you had less time down the pit there would be a greater disposition to take these risks?—I think, generally speaking, if these lids of suitable timber were provided there would not be so many accidents from men taking those deliberate risks.

30352. You take them now because you want in the time allowed you to get as much coal as you can, being paid by the quantity of coal gotten?—Yes, and because of lack of timber.

30353. If you have less time allowed down the pit, the greater will be the disposition to take these risks?—No, I do not think that would be so. I believe if we worked less hours there would be such provision for a regular supply of boxes to do our work in that we should do our work more regularly and more comfortably, and better. At the present time miners often have to do their work in rushes simply because there is on the part of the management not proper provision for the supply of boxes. They come in rushes, and we have to make rushes. That would be attended to if we had less hours. Furthermore men could not work at a higher pitch than they do during these rushes.

30354. You think if there were a better supply of boxes and a supply of suitable timber, even with less hours than now, you would get as much coal and keep yourselves as safe?—Yes.

30355. You mention at the end of your paper—I am not asking you about the matters I asked Mr. Twist about—investigation into accidents: "Where accidents end fatally we advice the coroner's jury should be composed of men who are or have been practical working miners, and power should be conferred upon them to visit the scene of the accident if they so desire." Would you have a special jury to investigate fatalities in collieries?—Yes.

30356. You would have *nobody* on the jury except men who have been practical working miners?—Men who have worked in the pit.

30357. What advantage do you suppose that would be?—I think the advantages are apparent. They would have a practical knowledge, and would be able to understand the conditions which were named, and under which the accident occurred.

30358. Do you think there is anybody in a colliery district who would not understand what is said to him?—I do not think it is possible for any man to understand the conditions of mining if he has not been in a mine.

30359. You would have a special jury to enquire into these accidents?—That is so.

30360. Is this the way you would provide for it? You would have to have a special list prepared. When a coroner has to investigate these accidents his man goes out to get a jury. You would have to have a special list prepared for him. It would mean having a list prepared, and all that sort of thing?—It would carry that with it, I suppose.

30361. I want you to see what it means. There would be a special list prepared periodically with a number of selected names—the names of men who had been working in the pit—and it would be from this list that the jury would have to be summoned?—It is my firm opinion that it would assist arriving at the truth at inquests if we had men who had been practical miners—if the jury on the whole were composed of them.

30362. A special list would have to be made by somebody of men working in mines who were qualified to serve as jurors. Are you aware that there is a power in the Home Office, if they think the facts have not come out, to have another enquiry of their own?—Yes.

30363. Do you not think that is sufficient?—No. I do not think that the further enquiry, unless they had actually men visiting the place, would result in any different conclusion.

30364. When they have an enquiry, a man goes to the place and hears all that is to be said about it?—My opinion is that it would be better, in the first instance, to have these practical men on the jury.

30365. What is your objection to the present arrangement? If the Home Office should be of opinion that the whole of the facts had not come out before the coroner and the jury, the Home Secretary can order an enquiry of his own, send his representative down, and hear all the people have to say, look at the place, and get the fullest information, and make a report. What is the objection to that arrangement? Will you look at Section 45 of the Act? "Where it appears to a Secretary of State that a formal investigation of any explosion or accident and of its cause and circumstances is expedient, the Secretary of State may direct such investigation to be held, and with respect to any such investigation the following provisions shall have effect." Then it goes on to make provisions, and it does not matter whether there is a death or not: "Where it appears to a Secretary of State that a formal investigation of any explosion or accident and of its cause and circumstances is expedient, the Secretary of State may direct such investigation to be held."—I should object to that, because it would be too cumbrous to get into motion. We should probably have a difficulty in getting an opinion expressed in that direction. As I said before, investigation at the moment the accident occurred, especially if the man could visit the scene of the accident, would be the best enquiry.

30366. Very well; that is your view. You are aware that in 1902 some new rules for timbering were established in Lancashire?—I am.

30367. And when that was done first of all the Home Secretary suggested these rules, and then there were conferences of employers and workmen to discuss them?—Yes.

30368. There were a number of meetings?—Yes.

30369. These rules were formulated as late as 1902?—Yes.

30370. There is nothing in these rules suggesting what you suggest now?—No. I cannot account for that.

30371. I only want to ask you this. Do you know that was never brought forward at any of these discussions on behalf of the men?—I was not aware of that. This has been my opinion, my strong opinion, on the question of accidents long before that period.

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30372. I have nothing to say against it, but I am pointing out that in 1902, when the timbering rules were discussed, this view of yours was not brought forward ?—I was not aware of that fact.

30373. (*Mr. Enoch Edwards.*) In answer to the Chairman you agreed with Mr. Twist in the answers he had given to the questions ?—Yes, I did.

30374. The only point you have brought before us is this question of timbering ?—Yes.

30375. Does that apply to Lancashire generally, or to the colliery where you work ?—To all the collieries I have worked in.

30376. Did you find a difficulty in getting lids at all places you worked in ?—Some worse than others; but at all the places I have worked in, periodically there has been this dearth of suitable lids, and I may add timber and props.

30377. Generally at the face you set a prop and a lid ?—Yes.

30378. Have you had much experience of bar timber at the face ?—Yes, I have had to set bars all along during my experience in the face.

30379. I understood you to say the reason they were not put was because of the cost of the timber ?—That is what I have had said in reply to me when I have been charged for setting these bars at the distance permitted for safety.

30380. Is it in your contract to set bars ?—In the roadway.

30381. We are talking about the working face ?—No; we simply set them for our own safety, if we are allowed.

30382. Is it part of your contract to set bars ?—No. Really it is the timbering of the coal face which is in the contract.

30383. Setting bars in the face would be in all cases for safety ?—Yes.

30384. Is it in your contract that you shall set such timber, whether they are bars or props ?—No, there is nothing specified in the contract.

30385. Would it be the case if you set bars you would expect to be paid so much a bar ?—No.

30386. They do not refuse on those grounds ?—No; the mere value of the timber.

30387. You suggest to the Commission in your experience such is the nature of the roof with its slips and faults, if bars were set many roads that are now lost would be saved in consequence ?—That is so; 50 per cent. of all accidents, practically speaking, happen through falls of roof and side, and I daresay 30 per cent. of them, probably more, happen at the coal face, and the biggest portion are from roof at the coal face. My opinion is that there should be a thorough and regular provision of lids varying from 18 inches or 1 foot of a suitable thickness, say 5 or 6 feet long, and that there should be a variety of sizes of lids. Of course long lids would have two props under to stop the pressure pulling them down at the end.

30388. As to the number of accidents from falls of roof and sides, there are no two opinions about that. It is a matter of statistics, and it demonstrates itself. You suggest as most of the accidents happen at the face it becomes a serious question. It is the business of this Commission to remedy that. In your judgment you say that if there was a plentiful supply of lids, and you were permitted to set these bars with longer lids, or two props, many of these accidents would be avoided ?—I believe they would be reduced.

30389. You have arrived at that opinion as a practical workman from what you have seen ?—I have arrived at that opinion from my own experience.

30390. Have you in your experience ever had an accident with any of your men working with you or for you ?—Not immediately or exactly at my side, but in the same district. I refer to a certain place where a man was killed. There was no proper provision of lids. It was a bad place for slips, and was noted for large slips, and in the absence of leaving proper lids they set round props, and sometimes one or two props underneath. I could not say that it was definitely through a prop that a man was killed, but he was killed among bad slips, and I knew that was the regular way we timbered, because we could not get a sufficient supply of lids.

30391. The timber was insufficient to sustain the roof ?—Yes.

30392. It was not so secure because of the difficulty of getting good lids ?—Exactly.

30393. (*Mr. Smillie.*) Have you had much experience in longwall workings in Lancashire ?—That is what I almost entirely work in.

30394. Most of your experience has been in longwall workings ?—Yes.

30395. Do your workmen pack their own goaf themselves ?—It is arranged by a contractor, as a rule.

30396. The ripping is done by contractors; they put on the packing and take down the ripping ?—Yes.

30397. Do the workmen at the face put any waste into the packing ?—The miner, you mean ?

30398. Yes ?—Yes, often.

30399. In spite of the present packing the roof comes down gradually as you get away from where the roof is ripped on to the packing ?—Yes.

30400. When the ripping is done in the road-head, what is the system of timbering there: is there any timbering put in at all, unless it is obvious that there is bad stone ?—Not unless it is bad. In most places there are no regular defined orders that they shall put bars up. In some places there are; in other places there are not. In cases where it is obvious that it is dangerous the bars are put up.

30401. If the rippers, when they have finished with the ripping, find a bad stone, they may put a bar to it to keep it up for the time being ?—Yes.

30402. If the fireman finds a portion of the road was bad he may himself, or on his instructions there might be bars or props put up to a bad part of it ?—Yes.

30403. A good many accidents occur on the drawing roads between the face and where the drawers land their stuff ?—Yes, that is so.

30404. From falls of roof or sides ?—Yes.

30405. Would it not be a great deal safer in longwall workings if there were systematic timbering in which there were props and crowns put up systematically every 2, 3 or 4 feet, as the case might be, whether or not there was any apparent danger for the time being. Would not that keep the road safer ?—Yes, I am sure it would.

30406. Both from side crush, if put wide enough to catch the side, and from top crush ?—That is so.

30407. You think that might prevent some of the accidents from roof and sides in the roadways which take place at the present time ?—Yes, and I may give you a personal experience in regard to this matter. I have also worked in the roof as a ripper, and I have known places where a contractor had the contract for packing the roof down and he had not the contract for putting bars, and the consequence was that we actually had to put the bars up to save our own lives, otherwise we simply left the thing as it was. We had so much work to do in such a length of time, and if we put these bars up—it has occurred both with myself and other workmen—we have put bars up because we could not tolerate the danger, and we have been two or three hours later, for the same money, than our time appointed to go home. Unfortunately, on many occasions dangerous places were left continually through the contractor not having the contract for timbering along with the roof.

30408. A contractor for ripping takes the contract by the yard or fathom, and in some cases only takes the ripping and stowing or building of the places; in other cases he is responsible for the timbering of that place ?—Yes.

30409. Sometimes they are not responsible and are not paid for the timbering ?—No.

30410. The rippers employed by them on day's wages have a certain amount of ripping to do; but in this case you refer to, in order to keep yourselves safe you put up bars which kept you considerably beyond the time you could have done your usual work ?—That was so in the place I refer to.

30411. As a general system would it not be well to have roadways, headings, levels and other places properly systematically timbered when the ripping is done, to prevent accident from falls of side and roof ?—I am strongly of opinion that that should be done.

30412. That is not provided for at the present time ?—No.

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Mr. DAVID WATTS MORGAN, called and examined.

STATEMENT OF WITNESS.

Mr. D. W. Morgan. 20 Nov. 1907.

30413. (1) For the due carrying out of the provisions, already in force, of the Mines Regulation Act, it is absolutely necessary that a greater staff of Government inspectors should be appointed. The present staff is far from being adequate and able to cope with the work. The present number, highly qualified and competent as they are, are unable, through want of time, to make periodical inspections of every mine in the South Wales coalfield. The inspection of mines should be efficiently augmented by the appointment of what I call working-men inspectors, so that the inspections could be made within a stated period as laid down by the General Rule 38.

(2) At present the workmen do not generally take advantage of the provisions contained in General Rule 38 and, to a very large extent, it remains dormant. We, as a Federation, try to encourage the workmen to, at all times, take advantage of this provision, but notwithstanding that the Federation is prepared and does pay the expenses, we find some opposition amongst the men to carry out our advice in this matter.

(3) Inspection under General Rule 4. I should like to see some provision being made so that the inspection can be more efficiently carried out. The number of places should be more limited than at present. The area to be covered by the fireman has a tendency to be overmuch, and cannot be efficiently covered within the time stipulated by the Act of Parliament. The actual working places that the men are employed at are generally the only places thoroughly inspected; the travelling roads, to some extent, are not given sufficient attention to unless the danger is such that it forces itself upon the sight, or knowledge, of the fireman in passing.

(4) The discipline and the due observance of the mining rules would be much better insured were the officials, who have, more or less, to directly deal with the workmen who are sending out the coal, to have only the duty of seeing these provisions duly carried out, rather than to, in many cases, have the responsibility of looking after the output of coal from the various districts.

(5) I prefer, where men are found guilty of breaches of the rules, that they should be prosecuted rather than fined in the colliery office. In my opinion it would have a most salutory effect upon the enforcement of these rules, because attention is thus directed to these unfortunate lapses on the part of men, connected with the mines, in the carrying out of their duties.

(6) There is room for a great deal of improvement in the method of establishing Special Rules, in the direction of allowing the workmen's representatives the opportunity of putting forward their views and the views of the practical workmen employed in the coal mines with regard to the composition or form in which such Special Rules should be drafted. Special Rules when once established should be published and copies placed in the hands of everyone employed in and about the mines.

I have advocated the opinion that it would be a great advantage if boys were taught the Special Rules in the last year before leaving school, so that where it was known boys would be going into the pits they would have some knowledge of the dangers and precautions which they have to observe in order to prevent accidents.

(7) A systematic method of timbering should be rigidly enforced. The system to be agreed upon after a consultation with the parties affected, so that a system most adaptable, or suitable, to the seam worked should be adopted at each colliery.

Timbering of all descriptions, which is very important and necessary for the protection of life, should be largely at the discretion of the workman to put them up after he has complied with the amount of timber required by the regulations laid down by systematic timbering. When a workman considers that it is necessary for the safety of life and limb to put up any timber, of any description above the agreed-upon number laid down by the method I have spoken of, no official should have the right to say that this timber cannot be put up without he gives consent to the same.

(8) Haulage accidents would be greatly diminished if there was a system of keeping one side of the road clear and wider from the rails in order to enable workmen to escape from accidents that are now taking place in consequence of the narrowness of the roads at some of the stages. In my opinion, during the course of the working shift no one should be allowed to travel, unless absolutely necessary, over these various engine-planes, and I think some arrangement could be made also that where it is necessary for dark lamps to be sent back to the pit bottom to be relighted, this should be done by a competent light-carrier, whose duty it would be to carry these lamps from the engine parting back to the pit bottom and then give them to the young collier boys and others who would be waiting for the return of their lamps.

(9) I certainly agree with mine inspectors that safety lamps should be introduced into all mines where there is the slightest danger of an explosion, and I think that Government inspectors should have full power to order the adoption of the same. It would be well that safety lamps, if possible, should be standardised, and as far as possible the same kind of lamp adopted throughout the whole of the coalfield. The screw-locked lamps should be entirely done away with.

(10) In all fiery mines I am of opinion that it might be made compulsory for the holes to be charged by a competent person appointed to do this work, instead of leaving this to be done by the men as it is permitted at present. It might also be made compulsory that the explosives should be supplied by the colliery company so that they should be certain, at all times, that the proper kind of explosives was being used and that, if it were necessary for shot-firing at all, every possible precaution was being taken so as to prevent the possibility of an explosion.

(11) In my opinion preparation should be made at each colliery and the latest appliances provided in order to enable men to descend a mine as quickly as possible after serious accidents in the shape of explosions and so forth. There is not, to my knowledge, any fixed method of dealing with this grave and important phase of colliery life such as we see in fire-brigades and the rescue of seamen.

(12) I would also suggest that at each mine a separate plan or diagram should be hung up at some place adjacent to the colliery, on the surface, showing the method of ventilation and the roads, also the doors, immediately under the pit bottom, up to such point as the ventilation was being separated for the various districts in the colliery.

30413A. (*Chairman.*) Are you a miners' agent at Porth?—Yes.

30414. First of all you say that the present staff of inspectors is far from being adequate, and you want working-men inspectors to be appointed. Is that all you want, or do you want more chief inspectors and more assistant inspectors of the same class as are now appointed?—Yes. If you would allow me to supplement what I say there with regard to that I should like to do so?

30415. Yes.—In my opinion the inspection could be made much more efficient if the districts were smaller and a chief inspector appointed.

30416. How many districts would you have? Would you divide the present districts into two, roughly? If you had two inspectors where there is now one, would that be enough, and, say, two assistant inspectors? Would you double the number of chief inspectors and the number of assistant inspectors?—Yes, and a little more.

30417. You would rather more than double the number of chief inspectors and assistant inspectors, and also have in addition to that a third class of working-men inspectors?—Yes; of course the geographical position of the districts would have a great deal to do with regard to that. Where the district would adapt itself, as our district would, I would suggest this. If we take the two valleys which comprise what we call the Rhondda Valley that in itself forms itself into a district which, in my opinion, should be under a chief inspector.

30418. You would have a chief inspector for that?—Yes.

30419. Roughly speaking, you would say that you ought to have more than double the present number of inspectors and assistant inspectors, and also a third class of inspectors?—That is so.

30420. How would you appoint the third class of inspectors? Would you leave the Government to appoint them?—Yes, I think that would be the best way.

30421. You do not suggest the men themselves should appoint the third class and that the Government should pay them?—The men should certainly have some voice in the appointment of them.

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30422. They might have power to suggest names?—Yes; make representations to that end.

30423. How much pay would you give to those third class inspectors?—Supposing we say £4 or £5 a week.

30424. You would give as much as £4 or £5 a week to them?—Yes.

30425. How many of that class would you have to each inspector's district?—Speaking for our own district, I think we should at least have three.

30426. You say then, perhaps, on an average throughout the kingdom you would want three of this class of inspectors to one chief inspector. You think that every chief inspector ought to have three of these men under him?—Yes.

30427. That is about the proportion you suggest?—Perhaps I am not making my meaning clear. I am taking our own district for forming my opinion with regard to this matter, and if our own district were formed into a separate inspectorship with a chief, I think we ought to have at least three working-men inspectors there.

30428. With regard to the inspections by the workmen under General Rule 38, you find some opposition among the men to carry out your advice in this matter. You find a disinclination on the part of the men to avail themselves of that power?—Yes.

30429. How do you propose to remedy that? You think it important that they should have this power and exercise it?—For the reason that that is the only way by which the colliery can be inspected as a whole under the present provisions. If working-men were appointed as inspectors, who could examine thoroughly every corner and nook in the mine, the provision so far as Rule 38 is concerned could be done away with.

30430. If you had your way with regard to the inspectors, you are not sure whether anything more would be necessary. You think Rule 38 might be repealed?—Yes, that is so.

30431. You would have instead some inspectors who had all the duties of a Government inspector, and also all the duties that now devolve on the men, or which might devolve on them if they carried them out under Rule 38?—There is so very little done now under Rule 38, as I point out in the evidence that I give. It is dormant in our district almost at the present moment.

30432. You think that the inspection of mines before the commencement of each shift under General Rule 4 is not sufficiently carried out, and that it is partly not sufficiently carried out because the districts are too large?—That is so.

30433. Do you say it is too large in all the mines with which you have any acquaintance, or only in certain mines?—I can only speak for the Rhondda Valley, the district that I come from. The tendency is that the districts are getting much too large for the firemen to be able to examine.

30434. That is no doubt according to your opinion the case in a good many districts. Do you think that is universal, or do you think there are places where the districts are not too large?—I have no knowledge outside our own district.

30435. In your district you say they are too large—all the firemen's districts in the mines with which you are acquainted?—Generally speaking, that is so.

30436. Not always?—Not always.

30437. Then you also say that the discipline and the due observance of the mining Rules would be much better ensured were the officials, who have more or less to directly deal with the workmen who are sending out the coal, to have only the duty of seeing these provisions duly carried out, rather than to in many cases have the responsibility of looking after the output of coal from various districts: your complaint is a complaint we have several times heard before, that these firemen have to do duty that they ought not to perform, and that as they are called upon to perform these other duties with regard to some extent the management of the mine, and which have nothing to do with safety, that their usefulness as a means of preventing accidents is somewhat impaired?—Yes, it is very much impaired.

30438. You require two things: first of all that the district should be smaller, and secondly that the firemen in each district should only have to attend to the safety of the mines?—Yes, that is so.

30439. As regards breaches of rules, you desire that the men should be prosecuted rather than be fined?—Yes.

30440–1. You find that is the general feeling among the men themselves?—I could not say—especially the men who are guilty of committing the breaches—I daresay if we selected them they would prefer to go to the colliery office, but generally speaking I think the men prefer to be dealt with by the magistrates rather than by the colliery officials.

30442. You would not have a fine for any breach of any rule whatever?—None. I think the mere fact of the men being taken before the Court in respect of breaches of discipline which affect the safety of the mine, would be a great advantage, and there would be the fear always before the men of being brought before the Court, and I think that would prevent these breaches taking place.

30443. Then with regard to setting up Special Rules, you say that the workmen's representatives should have the opportunity of putting forward their views, and the views of the practical workmen employed in the coal mines, with regard to the composition or form in which such Special Rules should be drafted. Your complaint is that you are not called in to consultation at a sufficiently early period; that the mine-owners have already put forward certain Special Rules that they desire should be observed before they ask your advice at all?—Yes, that is so.

30444. You suggest your advice should be asked at a much earlier period in the matter?—Yes.

30445. While these Rules are being thought about by the mine-owners, and before they are promulgated?—That is so.

30446. For the purpose of putting your views before them, I suppose now if the workmen were very much interested in setting up any Special Rule they would have no difficulty in putting their views before the Home Office. You could either do it through a mine inspector or write direct to the Home Office, and no doubt it would receive attention there?—That is so, but we still believe that we ought to have the opportunity which you have referred to in the first instance of stating the views of the workmen in the course of the Rules being drafted, or in the process of their being formed.

30447. It is not sufficient that the rules when once drafted and agreed to by the mine owners should be put before you. You think you ought to have an opportunity of expressing your opinion before the mine owners have pledged themselves to certain rules?—That is so. May I point out we find in some cases that the rules are very difficult to carry out because of not being framed properly.

30448. You can always object to them when they have been framed, and your objections are listened to, I believe. Can you not do that?—Yes, that is so, but after a good deal of trouble. It is a long way to go about it; in our opinion it could be best done at the very commencement.

30449. You think that could be done at an earlier stage?—Yes.

30450. But perhaps the mine owners, not having absolutely promulgated the Special Rules might be more willing to listen to argument. When promulgated they might not be so willing to listen to any suggestions of yours?—Yes.

30451. You think that would be so. Then you suggest and advocate the opinion that it would be a great advantage if boys were taught the Special Rules in the last year before leaving school. That has been suggested to us before. Then with regard to accidents and falls of roof and sides, you think a systematic method of timbering should be rigidly enforced, and the system to be agreed upon after a consultation with the parties affected. Do you wish to give any views that you hold, or your friends on behalf of whom you speak, with regard to timbering?—If I may be allowed to supplement what I mean by saying that a systematic method of timbering should be adopted, I should like to do so. Not only is it necessary in the coal face where work is being carried on, but the roadways should be more effectively timbered than they are at the present time, because a large number of these accidents take place on the roadways and not at the coal face.

30452. More than half of the accidents take place at the coal face?—That is so.

30453. No doubt some take place in other parts. You say that no official should have the right to say that the timber which had been agreed upon might not be put up unless he gives consent to the same. Where you have a system of rules of timbering, or where you have in mines some rules of timbering, is it in the power of an official

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to prevent those rules being put into effect?—This would apply to timber that would be required to supplement the number which is already laid down by the regulation.

30454. Your complaint is that very often a mining official will say "Here are the regulations: I give you enough timber to carry out those regulations, and I will not give you any more; I will not allow you to put up any more"?—It is very often the case that what we call the face props and sprags are put up, and then when it comes to protecting the roadway which has to stand the longest amount of time before there is any protection there, at some of the collieries the men are not allowed to put up that timber on the roadway until they obtain the consent of the official.

30455. You think the workmen ought to be considered to be the best judges, and if they think timber is necessary they ought to be allowed to have the timber put up?—Yes, I think the workman ought to have full power to put up any he thinks is necessary for the safety of his life and limb, whether it is provided for by regulation or no.

30456–9. Then you say that there ought to be a system of keeping one side of the road clear and wider from the rails, in order to enable workmen to escape from accidents. That has been very often suggested to us. Then you say that during the course of the working shift no one should be allowed to travel unless absolutely necessary over these various engine-planes, and you think that some arrangement could be made to prevent the necessity of travelling. You think there is more travelling than is necessary along the engine-planes on the part of the men?—Yes, I think some provision could be made to prevent the amount of travelling going on at the present time, especially by young lads required to carry lights, and so forth, travelling on these engine-planes, often when the journeys are travelling at a very rapid rate.

30460. Then with regard to safety lamps, you say that they should be introduced into all mines where there is the slightest danger of an explosion, and that the Government Inspectors should have full power to order their adoption. You recommend that instead of the present cumbrous method by which you have to go to arbitration?—Yes.

30461. Then you think it would be well that safety lamps if possible should be standardised, and, so far as possible, the same kind of lamp adopted throughout the whole of the coal field, and also that the screw-locked lamps should be entirely done away with. You have very few screw-locked lamps?—There are a good few, I am sorry to say, in our district.

30462. Then you think as regards firing explosives that it should be made compulsory for the holes to be charged by a competent person appointed to do this work instead of leaving this to be done by the men, as it is permitted at present. That is the practice?—That is the practice at present. In some collieries they take over the whole of the work in our district at the present time.

30463. That is the general rule, that the ordinary workmen down below, without any special knowledge of explosives, are allowed to charge the shot?—At some collieries that is so, but at other collieries it is not so.

30464. You say at some collieries that is so?—Yes; I think it would be about half and half.

30465. You think it might be made compulsory that the explosives should be supplied by the Colliery Company. That has often been suggested. Certainly every possible precaution should be taken to avoid the possibility of an explosion. You say that you think every possible precaution is not now adopted, and particularly that unskilled men are allowed to charge the shots?—Unfortunately we have had many accidents from shot-firing in our district.

30466. Owing to that?—Yes.

30467. Owing to inexperienced persons being allowed to charge a shot?—Yes.

30468. You think with regard to rescue apparatuses, that the latest appliances should be provided in order to enable men to descend a mine as quickly as possible after serious accidents in the shape of explosions, and so forth; and then you say that there is not, according to your knowledge, any fixed method of dealing with this great and important phase of colliery life such as we see in fire brigades, and the rescue of seamen. Surely now at a great many collieries they have drills with these new apparatuses and scientific dresses. They have appliance of this kind now?—Not in our district.

30469. Is there no such thing as pneumatophors in your district?—Quite a few, if there are any, but there is very little knowledge in connection with them.

30470. I hope before long that will be altered, and that you will find these rescue appliances are used, and also that a great many men will be able to use them?—I am glad to find that the coal-owners in the South Wales district are taking the matter up. They have already appointed a Committee.

30471. You think a separate plan or diagram should be hung up at some place adjacent to the colliery, on the surface, shewing the method of ventilation, and the roads, also the doors, immediately under the pit bottom, up to such point as the ventilation was being separated for the various districts in the colliery. All those maps and plans are in the office, but you think that they might be more widely available than at present?—Yes, and I find from experience there is a good deal of difficulty in getting up those things at the moment when an explosion may take place, when all the officials may be underground.

30472. Perhaps you suggest copies should be made of all these plans and hung about in various places in the mine?—Not in the mine, not underground.

30473. Well, on the surface?—Yes, on the surface.

30474. (*Sir Lindsay Wood.*) What are the sizes of the districts which you think should be made smaller for the firemen?—That would generally depend on the condition of the working face. In some cases you might allot a district of, say 30, 35 or 40 working places to the firemen. If that working face was open and he was able to travel from one end to the other, I do not think that would be too large an area for one fireman to be in charge of.

30475. I understood you to say that you thought he ought to devote all his time———.—Yes, to the ventilation and the general safety of those men immediately working in that district.

30476. Not to have any other work to do?—None whatever.

30477. Not setting timber, or anything of that sort?—No.

30478. Only to see that the men did set the timber?—Yes, properly fulfil his instructions in the setting of the timber.

30479. A sort of overlooker?—Yes.

30480. That is your idea?—Yes.

30481. In the timbering of the roads you say that the men are not allowed to put timber in the roads without the sanction of the Manager?—Yes, that is the case.

30482. Do you mean the main roads or the other roads?—It would apply to both headings and what we call "stalls."

30483. That is, the roads nearest to the face?—Yes.

30484. Not the main roads?—No, they would have generally nothing to do with the main roads in our district. That would be done by another distinct class of men who are called repairers.

30485. Only the short roads to the face and gateways. Is the timbering done by the hewer in those cases?—Generally it is done by the hewers.

30486. How far back from the face does that come?—It would depend. In some cases it would be roughly from 40 to 60 yards.

(*Mr. Wm. Abraham.*) The system of timbering is different. We have not the system of timbering by deputies.

(*Sir Lindsay Wood.*) It seems to me peculiar that the men are prevented from setting up timber in these roads except by the sanction of the firemen.

(*Chairman.*) Extra timbering, I think it is.

(*Sir Lindsay Wood.*) Yes, timbering they consider necessary.

(*Witness.*) There can be no doubt about it, because not many months ago we were called upon to deal with a dispute arising from a fall which took place, a man having to wait half-an-hour before the official came round to put up the timber, and meantime a heavy fall took place because of the timber not being put up.

30487. Did not the man put up the timber himself?—No; not until he gets permission to do so.

30488. Although it is for his own safety?—That is so.

30489. (*Chairman.*) He dare not put it up?—He had to wait until the official came round and gave him permission to do so.

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30490. Where he had the timbering and he might have put it up ?—Yes, the timber was there.

30491. (*Sir Lindsay Wood.*) Is that the system in that district ?—In that colliery it is very rigidly enforced.

30492. It is not general throughout the district ?—No, but there is a tendency at all the collieries to enforce something of the same kind. There is a greater stringency being acted upon by the officials with regard to the roadways, and so forth.

30493. It would be the fault of the timberman if he did not have that place properly timbered ?—I did not catch that.

30494. It would be the duty of some man to have the place properly timbered ?—It would be the duty of the man in the place.

30495. And you say he is prohibited from doing it ?—Until the official gives him permission to put it up. Then the same man still puts the timber up, but he must wait until he gets permission from the official to do so.

(*Mr. Wm. Abraham.*) Perhaps the witness would clear it up. In these instances timbering in roads and extra timbering have to be paid for.

(*Sir Lindsay Wood.*) They are paid for setting this extra timber, but the management say "Your must not set this extra timber for which I pay until you get sanction."

(*Chairman.*) If the man chose to risk not being paid by the management, it would not be a breach of the rules, but he wants to be sure of getting paid for it.

(*Witness.*) It leads to a lot of unpleasantness—any refusal of payment.

(*Mr. Wm. Abraham.*) I want to clear this matter up. We have had this matter in another district where there has been the same question. An official struck out timbering after the man put it up, and a case went to Court.

(*Sir Lindsay Wood.*) As to whether he should be paid for it or not ?

(*Mr. Wm. Abraham.*) The question was a question of payment, and to save the timber the official struck it out and the place fell in.

30496. (*Sir Lindsay Wood.*) You say there is too much travelling on the engine-road in your district. Do the men all come out together ?—At the end of the shift, yes; but there is a great deal of travelling which I think can be avoided, especially by young lads who are not quite competent to take care of themselves when the machinery is working.

30497. Do they travel on the main roads during the time the ropes are running ?—Yes.

30498. What do they do ?—They walk out to the bottom of the pit for the purpose of light and other things, which older men, men more competent to take care of themselves, could very well do.

30499. They come out to get their lamps lit ?—Yes; lamps are brought back to the pit bottom to be relighted when they go out in the dark.

30500. Is there much traffic of that sort ?—There will be a good deal in every colliery. Our men work together a man and boy together, and boys are employed on the coal, and of course the boy cannot be very well left in the face by himself to carry on the work, so he is sent back by the collier for the purpose of fetching the light to have the lamps re-lighted.

30501. In your district do they keep spare lamps in the stations near the face ?—It would be at the pit bottom generally.

30502. That may be two or three miles away from the working face—it may be a mile or two ?—Yes, a mile would be, perhaps, nearer the mark.

30503. In some it is two, in some perhaps three. You think that would be obviated if they had lighting stations much nearer to the face ?—Yes, or got elder men to do the work.

30504. Men travelling on the engine-roads would be men coming out and going in ?—That is so.

30505. The ropes will not be running at that time ?—Not in the morning or the evening, or the beginning and end of the shift.

30506. It is only, as it were, the occasional travelling which you are complaining of ?—During the shift.

30507. You recommend that the screw-locked lamps should be entirely done away with. Have you many accidents from lamps being opened in your district ?—I could not say exactly that there are many accidents, but we find that lamps are opened; and, indeed, during the course of working the lamp is shaken very much backwards and forwards, and sometimes the screw lock becomes loose in that way.

30508. I only want to know whether you have had many cases of men opening the lamps, or whether they are more easily opened with screw locks than any other ?—I could not say that we have had very many cases, but we know that it is a very easy matter to open a lamp.

30509. In spite of the screw lock ?—Yes.

30510. (*Mr. Wm. Abraham.*) We will go back to the question of timbering. The system of timbering in South Wales generally is that the collier puts up his own timber in the working place and in the road leading to the working place ?—That is so.

30511. Some classes of timber he is paid for, and other classes he is not paid for ?—That is so. All the timber put in the working place is not paid for, but included in the tonnage rate; the timber at the side of the roadway for the protection of the roadway is generally paid for separately by themselves, that is to say, so much for a pair of timber and so much for what we call a road post.

30512. All of which is necessary to keep the roads in repair ?—Yes.

30513. The rule is that the man has no right to put up a pair of timber or road post when it is necessary without consent ?—That is so.

30514. You know of a case that was taken into Court because of a man putting up a pair of timber and the overman striking it out, and a certain portion of the place falling in ?—That is what took place.

30515. Hence the opinion you hold, that it is necessary that the man should be allowed to put timber up where he thinks necessary, even if he is not to be paid for it ?—Yes, and I think he should have full power to put up any timber which he thinks is necessary above the regulation, whether it is paid for or unpaid.

30516. Who is that determines the distance that these timbers are to be put ?—Generally the manager.

30517. Even the distance of props in the face ?—Yes.

30518. The distance of sprags is determined by Special Rules ?—Yes.

30519. There is no interference with the right of men to put these timbers up, even if they put them up oftener than stipulated ?—No, not up to the present. We have had no case where they have interfered with the men in the coal face.

30520. There are cases happening in all of the districts on the roadways ?—Undoubtedly.

30521. What did you mean when you recommended systematic timbering in one of the paragraphs of your statement ? Will you explain what you mean by that ?—My experience is this, if I may put it in this way: in general cases we find that accidents and loss of life take place where the top is considered to be safe and timber is not required. Where the roof is brittle and soft we find that the men are very careful, and the result is that no accidents take place; but immediately they get into a district where it is supposed timbering can be dispensed with, the tendency is to be a bit neglectful and careless, and the result is that a stone or something breaks down quite unexpectedly, because there is no timber there. If systematic timbering was adopted, and timbering put up in all places, I think that would go at any rate some way towards the prevention of accidents.

(*Mr. Wm. Abraham.*) I think that is sufficiently clear.

(*Mr. Ratcliffe Ellis.*) I should like to know this, whether the difficulty is that he is not allowed to put up timber, or that he may not be paid for it ? What he wants instructions for is not to put it up, but that he is going to be paid for it.

(*Mr. Wm. Abraham.*) That may be a portion of the case, but if he puts it up he may be found fault with.

(*Mr. Ratcliffe Ellis.*) Supposing he puts it up, is not the penalty, if he has done wrong, in not getting paid for it ? It was put in the first instance that he was not allowed to put the timber up even if it was wanted there for the purpose of safety. I think the point is that he is in danger of not being paid for it.

(*Mr. Wm. Abraham.*) He is found fault with if he puts it up, whatever the necessity is in his opinion.

(*Mr. Ratcliffe Ellis.*) Is that so ?

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(*Witness.*) We have cases where men have asserted their right to put up the timber.

30522. And to be paid for it?—Yes, and the official has come round and knocked the timber out.

(*Chairman.*) The official would knock the timber out by way of saying that it was not required, and therefore that he need not pay for it.

(*Mr. Ratcliffe Ellis.*) It is not whether he may put it up. He may put it up and not get paid for it.

(*Chairman.*) It is in fact done to shew that it is unnecessary.

(*Witness.*) Yes, that is so.

(*Mr. Wm. Abraham.*) To try and shew that it is unnecessary.

(*Chairman.*) In this particular case it was not necessary to shew that it was required.

(*Mr. Wm. Abraham.*) Take it either way: there it is.

(*Chairman*). Naturally that prevents a man putting up timber. He says "I am not going to proceed with my work and put up timber if I am not going to be paid. Here is a dangerous place: I am not going to put up this timber, because I am not sure what view the Manager will take. I will wait till the Manager comes round."

(*Mr. Ratcliffe Ellis.*) He would not stop there.

(*Chairman.*) Do you want the matter cleared up any more?

(*Mr. Ratcliffe Ellis.*) No, I quite understand that.

(*Witness.*) I should like to add, if you will allow me, that we have a case that we have been investigating even where the timber has been put up on these travelling roads, where there is a very acute dispute in respect of being drawn out by instructions of the officials afterwards, where men complain that they are in danger of their lives in dealing with their trams and walking backwards and forwards over this roadway, which has been so treated.

30523. (*Chairman.*) These men took upon themselves to put up timber because they thought it was wanted, and the officials pulled it down to shew that it was not wanted, and now the men declare that they are in danger of their lives because of this pulling down?—Yes, that is so.

30524. (*Mr. Wm. Abraham.*) Is this not the case: that before the Manager had the sole power of saying timber should be put up without payment there was a complaint against the men?—Yes.

30525. Then since the Rule has been changed, and he has the sole power, the complaint is that the distances he allows them are too great?—Yes, that is so.

30526. And where the man needs to put up for his own protection in his own road a road post or a pair of timber, he is not allowed to put it up without the consent of the Manager?—Yes, that is the case.

30527. Again, it is sometimes the practice in several places in a long road with a good piece of top apparently that timber is not used?—Yes.

30528. In those places during the last two years several accidents have taken place from falls of stone from roof or sides?—Yes, I know of several accidents in my own knowledge that have taken place on these travelling roads when men are going in in the morning and coming out at night.

30529. We will come to that. That is one of the reasons I think that in that district we need smaller districts for the firemen to examine and to travel over, or more men to do it?—Yes, that is one of the reasons: I say so.

30530. I am taking our Rhondda Valleys. What, generally, is the district allotted to firemen? Is it easy for them to accomplish the work to be done, or is there a general complaint that they have too large a district, and much too large a district?—The general complaint is that they are too large, and it is very very difficult to work, especially so having regard to the other duties that are thrown upon the men during the day.

30531. Have we had occasion to call the attention of the Mines Inspector to that more than once?—Yes.

30532. And by his kind interference I think in one or two cases matters have been improved?—Yes.

30533. Generally speaking, they remain the same?—Yes.

30534. What are the duties of the firemen?—Of course, if we commence with the first work which they do in the morning, they are supposed to examine all the working places where men are employed during the day, and also any places where the air is travelling into any district, and they examine all the working places in all the roadways.

30535. Generally speaking, our collieries would be about the largest collieries in any district in the country. You understand they are large collieries as a rule. What would be the size of the district? What would be the length of road a man would travel from the bottom of the pit to the entrance of the district?—Generally speaking, it would be anything from half a mile to three-quarters of a mile, taking the average, before he commenced to come into his district.

30536. What portion of the roadway would he have to examine?—By the Coal Mines Regulation Act he is supposed to examine every roadway. But supposing he starts with his district, he has 40, 50, or it may be 60 working places in the coal face. He is supposed to examine all those working places, to examine every road that leads into that working face, and it is a matter of impossibility for any man to be able to do it within the allotted time.

30537. I think you said you can cite instances where accidents have happened to men going in in the morning and coming out before the shift really commences?—That is so. These places would be passed by the fireman. The men would be coming to their work ready by seven o'clock, have their lamps examined and see the fireman. He would report on the state of their places, and they would then walk towards their working places, and in the course of walking towards those places they would meet with these accidents.

30538. There is no doubt at all; if it is necessary you can cite instances?—I have half-a-dozen now.

30539. (*Chairman.*) Accidents from falls of roof and sides?—Yes, taking place during the time the men are walking to their working places in the morning.

30540. (*Mr. Wm. Abraham.*) You suggest that the firemen have so much to do that they have no time to make an examination of these roads?—Unless the danger is such that it will force itself upon the sight and hearing of the fireman during the time he is rapidly going through the district, he cannot possibly find it out. I grant you that they are very careful with regard to the actual working faces to see that there is no danger to be apprehended from that source, but in walking the roadways they have such a distance to travel, because they commence with the working face here, No. 1 place, they come in over that roadway, examine the "face," go to No. 2, examine that working place, back again through No. 2 road, up through No. 3, and the distance they travel in doing that examination precludes them from being able to devote the time they should to the roadways.

30541. There is a way of passing through the faces without going backwards and forwards through the roads?—That is so.

30542. And the opinion is that a good deal of examination is limited to the faces only, at the expense of not examining the roadways?—That opinion does prevail, and to some extent it must be so having regard to the distance the men have to travel.

30543. That points to the necessity for having the districts smaller?—Yes.

30544. Or to having more men?—Yes: I do not like the idea of more men, if I may be allowed to explain what I mean. We do not want to have the firemen's duties done by deputy.

30545. I will come to that, because that has been given as a reason not to appoint more efficient men, but a greater number of firemen who can be aided in the first instance in the morning by another class of men, master hauliers or something like that?—That is so.

30546. Have we in the district some collieries where the examination in the morning is done by that class of men, and not by the fireman himself?—Yes: we find that there is a good deal of complaint arising amongst the men in consequence of that.

30547. That is to say, done in order to assist the fireman?—Yes, because the district is too large and he cannot do it himself.

30548. So that he, during the day, takes charge of a district in which there are a number of places he did not see in the first instance?—That is so.

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30549. Come on: let us have it out?—I was just going to say there was one case brought to our knowledge some time ago, very lately, where three men were examining the district in the morning, one fireman and two deputies. Then the fireman would take charge of the whole of that district after he had seen the men to their work in the morning.

30550. In the next examination he himself would have to examine the whole district?—That is so.

30551. In addition to that he has to supervise the putting up of timber?—Yes.

30552. Has he something else to do?—Taking the time of the men generally, and in some cases he has to look after ventilation in the shape of putting up brattice doors, and so forth, look after the full coal, look after the output of coal generally in his district, which takes up a very great amount of his time.

30553. In a number of places during certain hours of the day the fireman becomes a kind of traffic manager?—Yes, that is so. *Mr. D. W. Morgan* 20 Nov. 1907

30554. He looks after the supply of trams, and so forth?—Yes.

30555. In your opinion that kind of work ought to be taken from him: he ought not to be obliged to do that?—I think it would be a great improvement if the fireman's duty was entirely confined to ventilation, and to looking after the safety of the men under his charge, travelling the roadways for the purpose of seeing that everything was being done properly as it should be done, in order to safeguard the lives and limbs of the workmen.

30556. What number of hours do these men work as a rule. We are in the Rhondda Valley now?—I am sorry to say that in a large number of cases they are very excessive hours, 13 and 14 hours are very general. They start at half-past three to four o'clock in the morning, and they are not free from the pit till five or half-past at night. Perhaps I should say there has been some change.

FORTY-FOURTH DAY.

Thursday, 21st November, 1907.

PRESENT:

Lord MONKSWELL (*Chairman*).

Sir LINDSAY WOOD, Bart.
H. H. S. CUNYNGHAME, Esq., C.B.
WM. ABRAHAM, Esq., M.P. (Rhondda).
ENOCH EDWARDS, Esq., M.P.
THOMAS RATCLIFFE ELLIS, Esq.
JOHN SCOTT HALDANE, Esq., F.R.S.
ROBERT SMILLIE, Esq.
S. W. HARRIS, Esq. (*Secretary*).

Mr. DAVID WATTS MORGAN, recalled and further examined.

30557. (*Mr. Wm. Abraham.*) With regard to the long hours worked by firemen, their numerous duties, and so forth, is there a change of policy gradually taking place now?—Yes. At some of our largest collieries they have initiated a new method altogether, and I am very pleased to say that at the Lewis Merthyr Collieries and the Cambrian Collieries, as we call them, they have fully adopted the system now of an all round eight-hours shift for the firemen.

30558. It has been in existence for some time at Lewis Merthyr Collieries, has it not?—Yes.

30559. With what results?—Very beneficial results so far as the safety of the men is concerned. It has had a material effect upon the number of accidents taking place.

30560. (*Chairman.*) Have you statistics to show that?—No, I have not statistics to show it.

30561. It would be more satisfactory if we could have statistics to show that the eight-hours shift had been instrumental in reducing the death rate from accidents—That information could be supplied.

30562. (*Mr. Wm. Abraham.*) You remember that one of the firemen said that only one fatal accident has occurred since that system has been in force?—That is so.

30563. In your opinion, a general adoption of that system would immensely reduce accidents in mines?—There is no doubt about that at all.

30564. Are you able to give any reason for it, in your opinion?—The men are now fully employed at the actual working places in the coal face, and they do not go from their district at all.

30565. (*Chairman.*) Then there is another reason besides the eight-hours shift that the safety of the miners is increased, in your opinion; the other reason being that the firemen only attend to duties in connection with safety, and not to other duties?—That is so.

30566. (*Mr. Wm. Abraham.*) So that they are enabled to make, if I am correctly informed, an inspection in addition to the inspection ordinarily made in other collieries?—Yes. *Mr. D. W. Morgan* 21 Nov. 1907

30567. And they are making that inspection when they are going down fresh from the surface?—That is so.

30568. So that in that case there has not been any place which has been left for a long period without being thoroughly inspected by the fireman?—It would be inspected within the course of a couple of hours or so each time.

30569. And that, in your opinion, has created beneficial results?—That is so.

30570. I think you have expressed dissatisfaction with Government inspection?—Yes.

30571. In what direction?—The area to be covered by the inspectors at the present time is so large that they cannot possibly give the time to it, so that it becomes, as I will call it, a kind of inspection by sample: there is only a part of the mine, and a very small one at that, being examined at the time.

30572. In your opinion, that is inadequate and very unsatisfactory?—Very unsatisfactory. I should like to say this to the credit of the present inspectorate that they are doing their work exceedingly well, but they have not got the time to devote to the inspection which they should devote to it. We have a number of cases where we have had to call the attention of the inspectors to matters, the men not being quite satisfied with the condition of the mine; we have called attention to the number of accidents taking place, and we have called upon them from time to time, until they have all their work cut out to deal with the work in the way in which they are doing at the present time, which does not deal fairly with the mine.

30573. That is to say, briefly, there is too much work for them to be able to do?—It is out of any reason.

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30574. You spoke about another class of inspectors in addition to the two classes we have now. What qualification would you give them?—I should like to see the practical side, so far as is possible, being adopted in the election of working-men inspectors.

30575. I think you state that the workmen now are not carrying out General Rule 38 with regard to the men's inspection?—Yes, I do.

30576. Do you think that as a rule those inspections are satisfactory?—Far from it.

30577. Are they more extensive than those made by the inspectors?—Yes. When they are made, of course, the whole of the mine is examined from end to end.

30578. In what respect do you say they are far from being satisfactory?—The men are not in an independent position so as to be able to make a true report of what is in the mine; I mean, they are to a very large extent, of course, dependent upon the goodwill of the officials of the colliery, and because of their not being independent, they are in most cases not able to give a correct and true report of what is contained in the mine.

30579. That is a serious statement. Do you think that is truly so?—I can cite an instance in my own case where I was taken back the second time to see the condition of a mine which we had condemned upon our first inspection, and I know of other instances where workmen have been dealt with; and although we cannot exactly prove that it is the result of their having made reports, it is very peculiar that the men are shifted away from the colliery—dismissed for some other offence.

30580. (*Chairman.*) I should like to quite understand what your complaint is with regard to your own report. You say that you were told to look at the mine again with a view of modifying your report?—Yes.

30581. Did you modify your report?—No.

30582. Then what happened?—The report stood as it was; nothing happened in my case. Perhaps it would be best for me to relate the incident to you.

30583. Yes?—I was one of two who were going round the mine, and we made a report, and the fireman called in question the report; and I daresay when he got it that afternoon, or sometime during the day, the manager called the fireman's attention to the report.

30584. It was the fireman who complained of the report?—Yes.

30585. And then the manager said that you had better look at the mine again, and say whether your report was correct or not?—No. This happened on the following day. The following morning when I went to my work I was asked to go and see this place the second time by the fireman.

30586. (*Mr. Cunynghame.*) What did your report say was wrong?—The return airway of the district was blocked and had not been attended to, and we made a note in the report that the airway was not in a proper condition.

30587. (*Chairman.*) I suppose that was reflecting on the fireman, whose duty it was to see that the airways were all right?—That is so.

30588. And the fireman who was implicated then objected to the report, and said it was an unfair report?—He asked me to go the following morning to see this place, and to make another report upon the condition of the return airway.

30589. You did so, and you stuck to your former report, and nothing happened?—We did not make a second report. We went to the place to see that it had been done, and we found that people had been engaged that night.

30590. You mean engaged in putting it right?—Engaged in putting it right.

30591. But you still stuck to your report that it was wrong at the time you made the report?—We allowed the report to stand.

30592. You did not modify your report in any way, and that report still stood?—Yes.

30593. What was the nature of the obstruction?—The place had been allowed to gradually close, and a fall had taken place there, with the result that there was a stoppage of air.

30594. That fall was removed, and then the air went round as usual?—Yes; that was, of course, remedied by the rubbish being removed from the road.

30595. (*Mr. Wm. Abraham.*) Was it a recent fall?—No, it had been of some standing.

(*Mr. Ratcliffe Ellis.*) Of course the return airway could not have been long blocked?

30596. (*Mr. Wm. Abraham.*) I think we are bound to get into this, although it is unpleasant to do so. Is it not within your knowledge that in many instances men are asked to go the second time to inspect places before making their reports on the books?—Yes.

30597. (*Chairman.*) That is to say, that if the management see the report and have reason to suppose, or imagine they have reason to suppose, that the report is unduly unfavourable to the condition of the mine, they ask you to go again and verify what you have said?—Yes, that is the case.

30598. Do you know of any instance in which a man has been dismissed, or in which anything has happened to him because he has stuck to his former report and refused to modify it?

30599. (*Mr. Wm. Abraham.*) That is not exactly clear, if I may say so. Has not your attention been called to cases where men, having gone round the first day, made a verbal report, and were asked to go down the second day before they put a report on the books?—Yes, we have had such cases.

30600. But the question is this: is the report on the second day what it was on the first?—No, because in that case it had been modified on the second inspection.

30601. (*Chairman.*) The point is that, although there was something wrong with the mine and the report said there was something wrong one day, before the next day what was wrong had been put right again, and the consequence was that the first report, which said that something was wrong with the mine, never saw the light at all?—That is the case. It is quite a common matter, if I may be allowed to put it in my own way, that when the inspection by workmen is taking place there is a good deal of carrying of brattice cloth, and all that kind of thing—everybody in the mine knows for hours before they see the inspector that there is an inspection to be made under General Rule 38.

30602. That is one thing, and I understand that. Then the next thing is this: besides that you say that if a man makes an unfavourable report of the mine it is apt to go against him. That is your experience?—That is my experience.

30603. Or, whether it is apt to go against him or not, he is afraid of it doing so?—That is so. I should like to say this, in fairness to the manager and perhaps the owner of the mine, that they would not be parties to this kind of thing, and they do not know of it, but it is the under officials who are the men upon whom the report will reflect, and it is the under officials, the firemen and the overmen, who continually deal with the workmen in their working places, and it is such an easy matter to find something objectionable in the conduct of the workman, and to find an excuse to dismiss him.

30604. You say you do not find fault with the management so much as with the under officials?—That is so, my Lord.

30605. Do you think it is the fact that the under officials are apt to afterwards bear a grudge against the man who has reported unfavourably as to their conduct, and that it is rather a dangerous thing for a man to do?—A very large number of our best men have been dismissed for some trivial offence or the other, and it is the best men whom we often try to find to do this kind of work. The result is that those best men now refuse to do the work at all, and the inspection is simply a sham.

30606. (*Mr. Wm. Abraham.*) I will put it straight to you: you in that district have no charge to make against head officials?—None whatever.

30607. As a rule they court these examinations?—Yes.

30608. And notwithstanding that the report of the first day is not the report written on the books, when an inquest occurs, these books of the second day's report are brought up as evidence on the condition of the mine?—That has been the case in the past in several instances. It is put as evidence of the good condition of the mine from time to time as inspected by the workmen.

30609. Let us be fair again now. How long have you been a Miners' Agent?—Nine years.

30610. During that time things have been improving?—That is so.

30611. And yet still we in our district fail to get our best men to conduct these examinations?—We have

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raised the matter, as you know, continually at our monthly meetings, and we have been trying to induce the workmen by all manner of means to carry out these inspections.

30612. We offer to pay for them?—We offer to pay for them from our own funds, but still there is a great reluctance on the part of the men to have anything at all to do with it: indeed, we cannot get our best men to do it at all, because they are not in that independent position of being able to say what they think they ought to say.

30613. With regard to travelling roads, you have recommended widening of the travelling roads?—Yes, for the people who have to use the roads in the transit of coal—in bringing out of coal to the pit bottom.

30614. Would it not be practicable to get the return airway done in such a way that it could be made into a travelling road?—Yes, we have been agitating for years in our district that every return airway at least should be kept so that a tram and horses could at all times travel through it from end to end, and it was with a view of its being kept as a travelling road for the people, especially during the day and at the end of the shift if the machinery is working, so that by keeping the returns in that condition they would be serving two very useful purposes: first of all it would be a way of return for the men from the work and to go in, and in the second place it would be a material advantage in the ventilation of the mine: it would secure better ventilation at all times by that road being kept in a travelling condition.

30615. These return airways as a rule are running parallel with the intakes?—The return airways run parallel with the intakes.

30616. So that it is simply a question of cost to do that, and to keep it in repair?—Yes.

30617. You said something yesterday about boys being allowed to carry lamps back to the bottom of the shaft to be re-lit?—Yes.

30618. Does that occur frequently: has a good deal of it been done?—Yes. During the whole of the shift, according to the number in the colliery, there would be a lot of work of this kind to be done; I mean, if the colliery was employing 400 or 500 men, there would be at least four or five of those boys continually travelling back from the face to the pit bottom in order to get their lamps re-lighted.

30619. What we call a "collier boy"?—A collier boy.

30620. Supposing there is a man and a boy working together, have they an extra lamp?—No.

30621. Then how does the boy take the lamp back at once to be re-lit?—He borrows a lamp from someone else who will be working close by, or perhaps, if there is nothing for his partner to do, he takes his partner's lamp, and that partner has to be in the dark until he comes back.

30622. Could this kind of thing be put an end to: could the distance be shortened by any appliance?—Yes.

30623. Do you think that could be done with safety: that is the point?—Yes, I think it could be done with safety, and even in a case in which that could not be done I would suggest that an adult person, who is competent to look after himself, should be employed to carry the lamps back from the parting to the pit bottom, and not to allow this great risk to be run by the boys.

30624. (*Chairman.*) You think there might very well be places where safety lamps were kept under lock and key—in a cage, we will say?—That is very difficult to do, because lamps kept in that way are not very satisfactory to the workmen.

30625. How do you mean? There is a deputy or somebody with a key who can go and open the cage and take out the lamp that is already lit?—Yes; but if there should be a large number of lamps burning in the kind of place you describe, they would get into such condition that they would not be of much use to the collier.

30626. Still, that is a common thing to do, is it not—to have lamps placed in cages or places where they cannot be got at, being under lock and key, except by the officials?—That is not the case with us. We have no lighted lamps kept anywhere underground to any extent.

30627. That is done in some parts of the country?—Yes.

30628. (*Mr. Wm. Abraham.*) Have you anything to suggest with regard to lamps being given to the men in the morning, and every man having his own lamp?—I think there should be a rule rigidly enforced with regard to lamps. The reason why I advocate that is that there is greater care then taken of the lamp by the man, and the officials have an opportunity of seeing how that lamp has been looked after when it comes back into the lamp-room. Unless a register is kept, and that same lamp is given to the man each day, a lamp may be brought back to the lamp-room damaged in a very serious way, and there is no possibility of tracing the offence the next morning. At a colliery where we have had some trouble with regard to this, the management complained that their lamps were being continually broken and so forth, and we found that the reason for that was that the lamps were even left lying about by some of the workmen who got careless in the matter, and the lamps were being damaged in that way. We strongly advocate a register being kept so that there should be that fear always hanging over the head of a man that he must properly look after his lamp and see that it is taken back to the lamp station.

30629. When the lamp is taken back it is known that it is his lamp and no one else's?—Yes, and if anything does happen to it then he has to render an explanation as to what has taken place.

30630. Then in the case of an explosion, or anything of that kind happening, it is more satisfactory too, is it not, that it should be known what lamps are out and with what men the lamps are?—Yes, that is another reason. It was of great advantage to us in the National explosion, which you know took place two years ago.

30631. And the absence of such a system was a disadvantage somewhere else?—Yes, such as the Albion colliery and the Cambrian colliery; we had a great deal of difficulty in the Cambrian colliery in identifying the man, because there was no regular lamp being given out to each man each day. In those cases, of course, we could only know the men by knowing that they were put in a certain place to work.

30632. (*Mr. Cunynghame.*) Have you had in your mine, or in any mine that you know of, any re-lighting arrangements?—Do you mean re-lighting batteries?

30633. No, I was speaking first of an apparatus which is largely used in Germany, called the Wolf re-lighting arrangement: they have a little coil of paper with some phosphorus on the paper inside the lamp, and then if you pull a trigger the paper ignites and re-lights the lamp. You have not seen them, perhaps?—I do not think they are in use in our district, but I have seen them.

30634. I should like to know whether you have any opinion as to them?—No, I cannot offer any opinion with regard to that.

30635. I want to get your impartial view upon this point: it has been thought by some people that it is unwise to allow a miner to have any means of re-lighting the lamp, even if it were quite a safe means of re-lighting, without having the lamp examined by a totally independent person. What is your view upon that?—I quite agree with that view: I think the lamp ought to be examined.

30636. From the mere fact that it goes out, it should be put through a good examination by somebody other than the miner. The question is, is the miner to be trusted to examine it before he re-lights it?—I think it would be much more satisfactory to have that examination made by a competent person appointed for the purpose.

30637. Then you would rather be inclined to think that if these re-lighting arrangements were found after experiment to be quite safe, as the Germans think they are, it had better be done not by a mere button which anybody could press, but by some form of key which only the authorised person would have?—That is so.

30638. Have you discussed that matter with others?—Yes, I have paid some little attention to the system we have in our district. The only objection which we offer to the lighting machinery which we have is that the owners sometimes leave that unattended, with nobody in charge of it. You know we have got the electric batteries underground.

30639. Yes, so that anybody could use it?—Yes. We think it ought to be placed in such a position and also in charge of someone who would know exactly how to use it.

30640. That may be stronger still, having regard to the fact that boys appear to be entrusted with lamps also?—Yes.

30641. With regard to the electric re-lighting, have you got an electric arrangement for re-lighting in your mine?—Yes, at several collieries.

30642. In the ones that you are familiar with?—Yes.

30643. Do they act well or not?—I think on the whole they act very well, but the complaint we have, as I have

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already indicated, is that they are left unattended in those places.

30644. If there was some such arrangement made that they could not be used without the use of a key which would be in the possession of some authorised person, would there be a way of meeting the objection?—I think so.

30645. I want you to deal with this question very much from the Home Office point of view so as to get your opinion. I put it to you that otherwise the apparatus is on the whole safe, so far as you know ?—I think so. Of course it is well known, since a recent explosion which occurred in our district, that it is possible to have a light from it—I mean outside the light to the lamp—and that is why we say it ought to be in charge of somebody who would understand it.

30646. You mean that has happened in a case in which it was not properly used, and it was left unlocked ?—That is so.

30647. But I suppose if it is really looked after and used properly, on the whole it is safe as at a re-lighting-station, if it is put in a safe place ?—I think so.

30648. Do you happen to know whether it is a high tension or low tension re-lighting arrangement that you have ?—I think it is low tension.

30649. With a battery ?—Yes.

30650-2. (*Mr. Ratcliffe Ellis*). Who is your inspector ?—Mr. Fred Gray.

30653. You say that the inspectors do their work satisfactorily ?—So far as I know we have no complaint at all. I think they do it exceedingly well, if I may be allowed to say so.

30654. Are they properly qualified to do the work they have to do ?—Yes.

30655. Have they worked at the face before they inspected, do you know ?—I could not say. I do not think so.

30656. At all events, whatever their training has been, they are thoroughly qualified men for their work, but they have too much work to do, that is your complaint ?—That is our complaint.

30657. As to these gentlemen, whatever their training has been you have no complaint to make with regard to their qualifications ?—I think they do their work remarkably well.

30658. With regard to the third class of inspector that you suggest should be appointed, what would his duties be ?—He would practically do what is being done by the workmen now, except perhaps he would do it more thoroughly, and he would be in an independent position to make a report. He would examine the mine—not a part of it, but the whole of the mine in its turn.

30659. You agree, I suppose, that a man who is to make that inspection ought to be in an independent position ?—Yes.

30660. With regard to the men who you suggest should make the inspection (I am speaking now about the third grade of inspectors) do you honestly consider that they would be absolutely free from any influence on the part of the men—any leaning towards the men ?—I did not quite follow the first part of your question.

30661. I want you to carry your mind in this direction, you agree that a man to be a proper inspector ought to be independent both of employers and workmen ?—To a certain extent, yes.

30662. Would the men whom you propose be men who were free from any influence on the part of the workmen: would they be independent of the workmen ? They would be independent of the employer: that is why you suggest them: but would they also be independent of any influence from the men ?—Oh yes. Of course they would have some leaning, certainly, but they would be independent of any influence.

30663. They would have some leaning towards the men ?—Yes, undoubtedly.

30664. You object to the inspector having a leaning towards the employer ?—I do not know that I do.

30665. I want to know whether you do or not. Do you ?—Well, to a certain extent one would, I daresay.

30666. I ask you whether you object to it. You would object to an inspector having a leaning towards the employer. Why do you not say that you do object to it ?—I should say yes, then, in this case.

30667. Is it not equally reasonable for an objection to be made to an inspector who has a leaning towards the men ?—Yes.

30668. You will agree with me that whatever he is, he ought to be in a position independent to both ?—Yes, I have already said so.

30669. A Government inspector, a man appointed by the Government, we suppose would be independent of both ?—Well, I do not know so much about that: I should not like to guarantee that upon every occasion.

30670. But that is one of the qualifications you would expect to find in a Government inspector ?—True.

30671. You do not find in the Government inspectors with whom you are acquainted that they have any leaning to either one side or the other ?—I do not know that is not the case, because naturally they are selected as a rule from amongst that class—from amongst the managerial department—and they certainly have a leaning towards employers.

30672. Then is your view this, that because a man is selected from a particular class he must necessarily have a leaning towards that class, and he cannot exercise an independent judgment ?—Well, is it not natural for him.

30673. Is that the view which you take ?—Yes.

30674. You start off with that impression ?—Yes.

30675. I suppose the third grade inspector whom we have been speaking about would be a Government inspector appointed by the Government ?—Yes.

30676. What would his duties be ?—To examine the mine, the working places and roadways.

30677. What would he examine them for ?—To find out what the condition of the roadways were, so far as timber and their general safety were concerned, and to examine the working places and to examine for gas.

30678. In fact he would do the same work as the chief inspector would do if he had time to do it ?—Yes.

30679. Then why should he be less qualified ?—It is not a question perhaps of being less qualified.

30680. I want you to forget for the moment the question of class altogether and wipe that out ?—Yes.

30681. Why should he be less qualified to do this work than the the chief inspector ?—I do not know that he would be less qualified to do this work which we ask that he should do now.

30682. You think he ought to be similarly qualified ?—No, that is not what I mean. What I say is that for the work of inspecting the colliery, so far as its general safety with regard to gases and so forth is concerned, I do not know that the man I have in my mind would be less qualified for that particular work. If it came to a question of deciding with regard to the machinery of the colliery, say, such as the winding engine and the other things, it is there that the theoretical part and the qualification of the chief inspector would come in.

30683. But is not the great danger you wish to guard against the danger in the mines down below ?—Yes, that is the one object that we have.

30684. That is the great danger you want to guard against ?—Yes.

30685. Why should he be less qualified for that particular work than the chief inspector ?—Because we do not regard the qualification required for that work as being so high as in the case of the chief inspector.

30686. Why not ? That is what I cannot understand ?—Because that qualification is not necessary.

30687. He is to have a knowledge of ventilation ?—Yes. A man who has been 10, 15 or 20 years in a mine would know all that is required to be known in connection with the system of ventilation, the system of dealing with gases, and whether roadways would be in proper condition with regard to timber, and so forth.

30688. Would you even appoint a man who had not a certificate at all of any competency ?—Under certain conditions I would.

30689. What conditions ?—Supposing we had two men to select from, and one had a vast experience behind him and the other had but only very little experience, but held a certificate in mining, I would much prefer, if I were asked to select which of those two men I would trust and appoint, to select the man who had the vast and wide experience behind him in preference to the other man.

30690. Then you do not think it necessary that firemen should have certificates; experience would be sufficient?—

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Yes, I do not think a certificate is necessary, but I think an examination should be made.

30691. You do not agree with the necessity for engine-winders having certificates, but experience is what you would rather go by?—Well, I do not know exactly what you mean by "certificates." Perhaps I am misunderstanding you.

30692. Certificates after examination?—I am of the opinion that an examination should be made of firemen to test their efficiency.

30693. But if the sub-inspector who has to have charge of this place can be selected for his experience, why should a fireman not be selected for his experience?—The sub-inspector, I daresay, would be examined.

30694. If you say that he must be examined, and that he must pass an examination and have a certificate, we agree; but if you say, as I understand you to say, that you would appoint men from experience in preference to men who have passed an examination, that is a different thing. I understood that that was your view?—My view is that it is not always a guarantee of a man's capability that he has secured a certificate.

30695. Then you would apply that also to firemen and to engine-winders with reference to the point of having a certificate?—Yes.

30696. Have you the Act of Parliament before you?—Yes.

30697. Will you kindly refer to Section 39: "A Secretary of State may from time to time appoint any fit persons to be inspectors (under whatever title he may from time to time fix) of mines, and assign them their duties, and may award them such salaries as the Treasury may approve, and may remove any such inspector. Provided always, that in the appointment of inspectors of mines in Wales and Monmouthshire among candidates, otherwise equally qualified, persons having a knowledge of the Welsh language shall be preferred." What do you want beyond that? That gives the Secretary of State power to appoint as many persons as he may think fit, if they are proper persons, with the additional qualification that if they are to go into the Principality they must speak Welsh. What more do you want than that?—If they are prepared to appoint a sufficient number even of those, it would remove to some extent our objection and remove our complaint.

30698. But what I am speaking about is that the power exists now in the Home Office to do all you ask they should do, namely, appoint an additional number of inspectors. There is no limit, you see. All they have to consider is whether they are fit persons?—Of course I do not know what is the reason, but I daresay it is the question of cost which prevents them appointing a larger number than they do at the present time. At any rate, that is what has been said.

30699. As a matter of fact, there is at the present time a power at the Home Office to do all that you ask should be done?—That may be.

30700. Then it is so, we agree?—Yes, but they do not appoint.

30701. If you have a sufficient number of inspectors appointed who are fit persons—it does not matter what class they come from if they are fit persons—to do such inspection as you think is necessary, is it then worth while having any inspection at all under General Rule 38?—As I said yesterday, I think if we had a sufficient number of inspectors, so that the mine could be examined within the time laid down in the Mines Regulation Act, within a reasonable period, that General Rule could be done away with—it could be repealed.

(*Chairman.*) You would not call a month a reasonable period? The period which is fixed for the men to make the examination under Rule 38 is, if they choose to do it, once a month.

(*Mr. Wm. Abraham.*) At least once a month.

30702. (*Chairman.*) At least once a month. Would you suggest that a sufficient number of sub-inspectors should be appointed to examine the mines thoroughly once a month, or do you not think that would be necessary?—No, I think that would be perhaps asking too much; but I think the mines ought to be examined thoroughly at any rate within three or four months.

30703. That is to say not less than three or four times a year?—That is so.

30704. (*Mr. Ratcliffe Ellis.*) You disapprove of fining as a punishment for offences?—Yes.

30705. Of course you know that there cannot be a fine inflicted without the man's consent?—That is so.

30706. But even safeguarded in that way you disapprove of it?—Yes.

30707. I suppose men are not so perfect in South Wales as to make it unnecessary to punish for breaches of the Mines Act. It is necessary that there should be some punishment in order to secure discipline and to secure safety?—Yes.

30708. If a prosecution has to be taken in every case, I suppose the first step would be that some of the officials of the mine have to go down to the magistrate's clerk's office and take out a summons?—That is so.

30709. They are taken away from their work and their duties probably for a day; I do not know how far away from the pit the magistrates' clerk's office may be, but probably for a day the official would be away from his duties getting the summons. That is the first step; do you agree?—Yes.

30710. Then the case has to be heard before the magistrates, and again the official has to be away from his duties?—I agree.

30711. It happens in some districts—and perhaps it is so in South Wales—that there is not a magistrate sitting on the Bench who could try the case; they may be all either colliery proprietors or their brothers, or miners' agents, and so on. Do you find that is so?—No, we do not find that very often in our district.

30712. You are free from that. Then at any rate it takes another day there; and then the question of cost in connection with the prosecution is considerable to the owner?—No doubt it is.

30713. You wish discipline to be maintained, I suppose?—Yes.

30714. Do you not think that if a prosecution had to be taken in every case a good many breaches of the rules would remain unpunished altogether?—I do not think so.

30715. If they did remain unpunished it would be prejudicial to discipline?—If they did, yes.

30716. Therefore you do not think that if you say to an employer, "Now the only way in which you can punish an offence against discipline is by going to this great expense, and taking your official away from his work," there is a chance that he will leave the offence unpunished altogether?—I do not think so; at any rate, speaking for our own district, I do not think that would be the case.

30717. Do you think that in the numberless cases of small breaches of the Act they would go to the expense of prosecuting in each case?—I think so. At any rate they ought to.

30718. Supposing they did not choose to do that; then, in your opinion, would discipline suffer?—No, I do not think it would if the plan which I advocate were adopted, of taking all these cases to Court, because there would be so many less offences against the Act if that were done.

30719. Then you think force is a remedy in that case?—You know the fear of the police court held over the men in that way would have a very salutary effect upon their discipline in the mine. [redacted]

30720. How long do you think it would take in South Wales to bring that salutary effect into operation?—I think we are decidedly improving now. We have had in some cases a system creeping in of finding men at the colliery office, but not to a very large extent; but since it has been done away with entirely the men are taken to Court, and it has had an appreciable effect upon the conduct of the men.

30721. Now I will ask you about the Special Rules. You know that under the Act now there is an obligation put upon the employer to propose Special Rules when he commences working a pit?—That is so.

30722. You propose to alter that?—To the extent of inviting the parties who have to live under those rules to be a party to the framing of them.

30723. Supposing your view was carried out, and that before an owner could propose a rule he should have to invite the men, would you entitle him, whether the men agree or not, to go on and propose a rule, or would you say, "You shall not propose the rule unless the men agree that you shall propose it"?—I do not know that I would prevent the owner from carrying out what is provided in the regulation at present of going to arbitration with regard to the matter in dispute.

30724. But he goes to arbitration at a later stage; first of all the rule has to be proposed to the Home Office?—Yes.

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30725. Then if the Home Office and the employer do not agree, the matter goes to arbitration. But you want to say that before the owner shall propose the rule he must invite the men to discuss it with him?—Yes.

30726. What I want to know is this: at that invitation are the men to have a veto, or are they merely to be allowed to say what they like, and then the owner is to go on and propose a rule, whether the men like it or not?—In case they may fail to agree I do not know that I would veto the right of the employer to still propose the rule, provided that the workmen had an opportunity upon the same footing exactly as the employer before the Secretary of State, or before any arbitration occurs.

30727. What I suggest to you is that, instead of having the men intervening before the rule is proposed, before the rule is established it should be advertised by the Home Office, and that the men should then have an opportunity of stating any objections they have to the rule and having those objections decided by arbitration?—In my opinion that would be rather a cumbrous way of getting at the matter, and once the rule had been framed it would be much more difficult to get the owner to agree to change that.

30728. But do you not see the owner is absolute; he can say, "The Act of Parliament may allow you to come here, but now I am going to propose this rule." The owner is absolute even on your own scheme, and what I suggest is that the coming in of the men should take place when the rule is proposed?—I do not agree with you. I want the men to come in at the first going off, when there is an inducement to the owner to frame the rule in such a way that the men will have no objection to it.

30729. You quite agree that, whatever the result of that conference may be, the owner can propose a Rule as he thinks fit?—I would not veto his right to do so.

30730. That is to say, that he can propose the Rule?—That is so. After they have failed to agree, if the workmen and owners have failed to agree.

30731. (*Mr. Wm. Abraham.*) The probability is that in nine cases out of ten they would agree?—Yes. That is what I suggest. That is my experience.

30732-7. (*Mr. Ratcliffe Ellis.*) With reference to safety lamps you say there should be a standardised lamp, and that there ought to be one safety lamp in each district. Why should there only be one?—The workmen would become familiar with it.

30738. But would not that be rather establishing a monopoly?—It may be so, but I would even risk that evil to get a lamp in the hands of the workmen as to which everyone was acquainted with all its parts and everything in connection with it.

30739. Yes, but the risk you are running is not yours: the risk is that of the employer, and if he is compelled to buy a particular lamp he might have to give a good deal of money for it. It is not your risk that you are running?—That may be true: I have not looked into that.

30740. Do you seriously think that if there are a number of lamps pronounced to be satisfactory by some official test it would make much difference to you what lamp the employer used?—It does make a big difference in our district, because we have a large number of unskilled workmen brought into the district, and these lamps are given into their hands, and the workmen, not knowing in some cases with regard to the lamp itself, there may be changes brought about in the colliery so that these people would not be able to know and would not be able to deal with the lamp. We have also a very large number of young lads employed.

30741. I suppose any lamp would be a mystery to them?—To some extent, yes.

30742. However, your view is that you should be able to say that there should be only one particular lamp. With regard to shot-firing, do you usually fire shots in the roadways when the men are in the mine?—No, they are fired between the shifts, generally speaking. Of course we have some collieries where the shots are fired by the men.

30743. But not many are fired in the roads, I should think?—No, not a large number.

30744. Have you any suggestion to make beyond what is provided for in the Rules under the Act of Parliament as to shot-firing in roadways. Is there any further precaution you would suggest?—Yes. I think the explosive to be used ought to be under the control, and the detonator ought to be in the charge, of a competent person who would be employed in going through the roadways in which shot-firing is required, and who would do all the work in connection with charging the holes.

30745. We will speak about the roadways and not the coal for the moment?—Yes, I am speaking of the roadways.

30746. Is not that the case now?—No.

30747. What is your practice in South Wales now as to shot-firing upon the roadways?—A man would bore the hole———

30748. What man?—The man in the working place.

30749. I am not talking about firing shots in coal, but in the roadways?—I am speaking of the roadways where the men rip the top themselves—the men who are working in the working places carry on and rip so much of the top.

30750. It is only at the immediate entrance to the working place?—No, almost the length of the road.

30751. How far away from the working place does the collier, the coal getter, rip the top down?—They would carry this thickness of ripping down with them as far as the tram would go.

30752. On to the main haulage road?—Yes, from the main haulage road up to the end of the road.

30753. What distance would that be?—40, 50 or 60 yards, as the case may be.

30754. (*Mr. Smillie.*) The ripping is done almost at the face—within a few yards of the face?—Yes.

30755. Mr. Ellis is now dealing with the part back in the road. The colliers do not bore holes out in the main haulage ways?—No, not in the main headings. I beg your pardon.

30756. (*Mr. Ratcliffe Ellis.*) We will come to the face afterwards. Who drills the holes in the roadways?—The staff of men we call the repairers.

30757. Are they competent?—Yes.

30758. So that you have no objection to make to that practice? Then who charges the holes?—The men who are employed on the job—the repairers.

30759. Are they competent to do that?—Having regard to our experience, they are not at all times as careful as they should be.

30760. Nobody mortal is wise at all hours?—No.

30761. But, generally speaking, are they competent men who do it?—Generally speaking, perhaps they would be.

30762. Who fires the shots?—The shotsman—the shot-firer appointed for the purpose.

30763. Then he is a competent man?—Yes.

30764. He goes down between the shifts and fires those shots?—Yes, or he has done it already.

30765. Have you any arrangement by which, before a shot is fired in the main haulage roads, it has to be brought before somebody other than these repairers to see whether the shot should be fired, and to deal with the conditions under which it should be fired, and the weight of explosive that should be put in—in fact, all the details with reference to the shot? Has that to be decided by some official superior to the road makers?—Yes, generally the under-manager.

30766. Then you have not any suggestion to make beyond that?—Do you mean with regard to shot-firing?

30767. Yes?—Oh yes. I suggest that the stemming or the charging of all the holes that are to be fired ought to be done by the shotsman.

30768. I understood you to say that so far as the charging is concerned you had no fault to find with that. It is charged by a competent person. I am speaking now of in the roadways—not in the coal, or in the immediate access to the coal?—That is what I am speaking of, too. We find instances taking place now and again of accidents in shot-firing.

30769. Are those accidents frequent? I understood generally you thought those men were competent?—We have had quite a large number during the last two or three years.

30770. You think even with reference to shot-firing in roadways, the men who charge the shots now are not competent men. They can drill the shots, but they ought to be charged and fired by a specially appointed official?—That is so.

30771. With reference to shot-firing in the coal, is that done during the shift?—I could not speak as to that. We have no shot-firing in coal in our district: I am only dealing with shot-firing in the roof.

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30772. (*Mr. Smillie.*) In the ripping ?—Yes.

30773. (*Mr. Ratcliffe Ellis.*) So far as shots are fired in the ripping, are they fired between the shifts or during the work ?—Between the shifts.

30774. So that you have no shot-firing there except between the shifts ?—That is so.

30775. What is the explosive which is generally used there ?—It varies. Gelignite or Roburite is the explosive used in the roadways, generally speaking.

30776. Are they fired by electricity ?—Yes.

30777. The man who has the detonator is not the same man who has the explosive, is he ?—That is part of the system that we make some complaint with regard to it. The detonator is given out by the shotman, and may be lying about for hours before it is used.

30778. That is a breach of the rule, surely ?—It is a breach of the rule, but how can you detect it ? Supposing the shotsman is being sent round the colliery at about 12 o'clock, he goes round at 12 o'clock in the day, and if he has 10, 15 or 20 holes to be fired he starts at 12 o'clock and goes round and gives a detonator to the first man, another to the second, and another to the third and fourth, until he has covered the district.

30779. But do you ever find any of these detonators in the coal ?—They have been found even sent out with the rubbish. They have been found in the rubbish tip on the surface at one colliery in our district.

30780. That is a very infrequent occurrence, I should think ?—It is an infrequent occurrence, but it was rather startling when we did find it.

30781. I suppose you think there ought to be more care exercised in regard to this matter ?—Yes. We think the explosive and the detonator used should be in the custody of the man, and that the shotsman who is in charge of the district should charge the hole himself.

30782. Have there been many accidents in consequence of the absence of such a regulation as that ?—I could not say that there have been many accidents in consequence of that.

30783. But you think it would be safer to have such a regulation ?—We think it would be safer. We should be much more satisfied.

30784. With reference to the travelling roads, you propose to use the return airway for travelling ?—I think it would be safer than the present method.

30785. But is the return airway a place in which people should be encouraged to go ? You see you cannot light lamps in the return airway ?—No, but that would only be used for travelling in and out from the mines.

30786. But is it a nice place to travel in ?—It is not nice, but you sometimes prefer doing that when you have got it safe. It is quite true that the atmosphere there is not very pleasant, but it would be much safer.

30787. You suggest that as the alternative to travelling along the haulage roads when the machinery is in motion ?—By all means.

30788. When the men go into the mine in the morning is the machinery in motion ?—No, it is idle at that time.

30789. So that so far as that goes there is no great danger in getting into the mine ?—No.

30790. It is the coming out of the mine—they cannot come along the roads when the machinery is in motion ?—Yes, at the end of the shift.

30791. Is it generally the case that the machinery is in motion as they are coming out ?—Yes.

30792. You think that however disagreeable the return airway might be from an atmospheric point of view, yet it is safer than passing along the haulage roads when the machinery is in motion ?—Yes, and especially so during the day, more than at the end of the shift: men require to come out then.

30793. The only cases of men coming out are cases where men go to light their lamps ?—But there is a good deal of trouble from that; you find ordinarily 5 per cent. or 10 per cent of the men at least require to come out at some time during the day to go up the pit.

30794. That is where the danger is ?—Yes.

30795. Are these haulage roads originally constructed wide enough to have a travelling road at the side ?—In some cases they are. I have seen cases where that system which I have pointed out of having room at the side is kept.

30796. But are they generally sufficiently wide, if they are kept at their original width, to make sufficient room for a travelling road alongside of them ?—If they were kept as wide as they were originally, then that would be the case. But what I should like to explain is this: what we complain of is that rubbish, timber, ropes, and everything else are oftentimes allowed to accumulate on the roadways, especially on these engine planes.

30797. (*Chairman.*) Is not that contrary to one of the General Rules, which provides that the roadways should be kept clear ?—The roadway itself would be kept clear; this would only apply to the sides.

30798. But then the side is a roadway: it is a place where people walk, is it not ?—No, I am afraid not within the meaning of the Act.

30799. (*Mr. Wm. Abraham.*) There is one question which I should like to put to you with regard to the return airway. Of course in nine cases out of ten, to a man who has been working and perspiring all day, a good return airway would be more pleasant to travel in than going straight against the current ?—That is so; it would certainly help his temperature, if one may say so, in coming out of the pit bottom.

30800. (*Chairman.*) In the South Wales code there is a Rule with regard to keeping the roadways clear, but that only refers to where there are falls ?—That is so.

30801. That is quite different, of course, Your complaint is that all sorts of rubbish is kept at the side of the roadway where men walk up and down, or may have to walk up and down ?—Yes.

30802. There is a Rule, Rule 156 in the Code of Special Rules for South Wales, with regard to roadmen, which says: "He shall carefully remove all obstruction from the roads in his charge, so as to maintain them constantly in a safe state for travelling therein"—so that if the roadman did not do his duty he might be reported ?—If that rule were carried out, and if all the rubbish were removed daily we should not have much reason to complain.

30803. Are there not always such persons as roadmen ?—Yes, there are roadmen, but all that they are asked to see to is the roadway itself, and if the roadway is itself clear sufficient for the trams to be passing, that is all that is thought necessary.

30804. Surely you cannot say that a roadway is clear if the gangway at the side of the road is filled with rubbish ? I should have read this Rule as implying that it was the duty of the roadman to remove all obstructions from every part of the road in his charge. Surely the gangway at the side along which the men come would be part of the roadway ?—That is not so. It may be obstructed for days.

(*Chairman.* Then it seems to me that Special Rule 156 is not carried into effect, and you ought to see that it is carried into effect.

30805. (*Mr. Enoch Edwards.*) The Inspectors you refer to are the District Inspectors ?—Yes.

30806. They have assistants, I believe ?—Yes.

30807. How many assistants has Mr. Gray ?—I believe Mr. Gray has two.

30808. They are confined to what you call the Rhondda ?—No, they have to cover more than the Rhondda: they have the Aberdare district. It is a very very large district which they have to cover.

30809. How many pits are there ?—I could only give you approximately the number: they would have about from 80 to 100 pits.

30810. Most of them large pits ?—Very large pits: and as we grow older of course the collieries to some extent grow older, and the distance to travel underground is much more than was formerly the case.

30811. You have stated that you have no complaint to make about the present Inspectors ?—Not with regard to the work.

30812. Not with regard either to their ability to do the work or their disposition to do it ?—No—no complaint whatever. But we do complain that we see them but very seldom; and as I have already said, their time is taken up in dealing with accidents, and they are there only after the accident has taken place, and not before. To show the unrest that there is amongst the men, we have had occasion during the last two months in three or four cases to call the attention of the Inspector to some things going on, and he has gone there to examine and put the matter right.

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30813. What number of inspections would those three be able to make in a year at each pit?—It is very difficult to say, because one has not seen them working to the best advantage, in consequence of their time being taken up with the accidents. At present I do not know that they could examine these collieries once a year—that is to say, properly examine each colliery.

30814. You mean that they would visit the pit in the case of an accident?—Yes, they would go and see the locality where the accident took place, and they would have to go back and attend the inquest. A large number of collieries are only visited in that way.

30815. So that that would not be an inspection of a colliery?—No, not what we call a proper inspection.

30816. Except the place of the accident?—Except the place of the accident.

30817. When Mr. Ellis asked you about the appointment of further Inspectors he asked you whether it would be necessary that they should have the same qualifications as the first-class Inspectors. First of all you consider that they should be practical Inspectors?—I do.

30818. You mean by that that they should be men who have worked in mines and understand mines and every part of them?—Yes.

30819. You mean that although they would not be able to pass a technical examination on the higher subjects, like electricity, and so forth, they would thoroughly understand the mine?—Yes.

30820. That is the type of man you have in your mind?—That is the type I speak of.

30821. Now will you give the Commission the reasons which exist in the minds of the men for their wanting this type of Inspector?—My own way of putting it is that the men think this class of men would be much nearer to them and would be able to do the work, because to a certain extent the thorough examination of a mine is very laborious work; and for that reason they would be more approachable, and they could be asked to go to those places, which is not the case with the general body of workmen now. We, the miner's agents, or somebody in authority at the present moment, are perhaps only able to approach the District Inspector: the workmen themselves would never dream of approaching the Inspector. If a lower grade of inspectors were appointed they would be in that sense much more open for consultation, and that kind of thing.

30822. (*Chairman.*) Why should not a workman approach even a District Inspector direct if he likes?—Well, there is such a distance between the two grades.

30823. Surely if a workman has something important to say he would be able to speak to the Inspector.

(*Mr. Wm. Abraham.*) He may live too far away.

30824. (*Chairman.*) Yes, but when the Inspector happens to be there; supposing an Inspector is going round a mine, and a workman wants to say something to him about the state of the mine, do you mean that an ordinary workman would not speak?—There would be generally the foreman or the overman and manager with the Inspector at that time: that is the difficulty.

30825. They can communicate by letter. Do not the colliers communicate with the Inspector by anonymous letters sometimes?—It may be the case, but they generally come to us, the Miner's Agents.

30826. You are the go-between?—Yes.

30827. (*Mr. Enoch Edwards.*) What are the reasons you give now.?—You think some of the reason is that the great bulk of the workmen are not brought into touch with the Inspectors at all, and do not see them?—Yes; they do not see them.

30828. And of course the District Inspector, or any Inspector at all, is very rarely at the colliery?—Very seldom.

30829. I should like to put it to you further, are there any other reasons why the workmen are anxious that this new class of Inspectors should be practical men in the pit?—I have said in answer to Mr. Ellis that I think one other reason which is given is that there is very much too much importance attached to the theoretical part of it, and that more attention should be paid to the practical part, and the Inspectors who are appointed already even doing their best will have a leaning towards the employers, and naturally so, because they have been brought up in that groove themselves: and the men think that someone ought to be appointed on the other side who will have some sympathy with the workmen.

30830. Does it not arise largely among a number of men from an impression which they have that the mines will be more thoroughly and exhaustively examined by the practical workmen?—Yes. The mine under this system will be examined as I said, every nook of it; the examination will be started at one end, and they will go right through the whole of the mine and inspect it from top to bottom.

30831. I noted your answer to Mr. Ellis as to the inspectors leaning towards employers. The inspectors are supposed to discharge their duties as between employers and workmen generally?—That is so.

30832. Of course the workmen you referred to were workmen who inspected under General Rule 38?—Yes.

30833. That is rather a different thing?—Yes.

30834. With reference to your complaint about timber, I understood you to say that workmen had set timber in a roadway and that the officials had knocked it out again?—Yes.

30835. Why was that done?—The officials held the opinion that it was not required, and in order to prove that they knocked this timber out.

30836. The officials were of opinion that it was not a dangerous place?—Yes, and that the timber should not have been put up.

30837. That would be in the main roadway?—Yes.

30838. Then you do not timber all the main roadways: there are portions that are not timbered?—There is no portion that is not timbered at all with timbering of some description. In some cases we only put a road post on the side of the road, and in other cases we put up a post and bar across. I have two instances in my mind where a fall has occurred immediately after the timber has been struck out.

30839. Of course you are not now dealing with timber at the face?—I am dealing with timber in the roadway.

30840. You do not suggest that this has reference to the face and the workman setting his timber there, but it is in the roadway?—The roadway.

30841. How far back would that be from the face?—It would be within four or five yards from the face, sometimes quite at the face.

30842. Would it be such timber as the contractor is called upon to do in his contract?—No; that timber would be timber that would be paid for, and it is for that reason, that it was to be paid for, that there was this action on the part of the official in knocking out the timber.

30843. So that it is not so much a question of safety or otherwise as a question of having to pay 1s. or 2s. or 2s. 6d. for setting and repairing timber?—That is so.

30844. (*Chairman.*) The man would demand to be paid for the timber, and then he would be told that it was not necessary, and that they would not pay him, and to prove that it was not necessary they would knock out the timber?—That is so.

30845. Then supposing a fall occurred, showing that the timber was necessary instead of being unnecessary, I suppose in that case the man would get paid. In the case of a fall having occurred, which fairly proved that the timber ought to have been put up, the man would be paid even although he was not paid beforehand?—Yes; in that case the company would pay for the repairing of the fall, and also for the timbering.

30846. They would also pay for the first setting of the timber because it was proved by the fall that there was need to set timber?—Yes, but he would not be paid until we were called in to deal with the dispute, probably.

30847. (*Mr. Enoch Edwards.*) What you mean by systematic timbering is that there should be one general rule?—Yes, and that timber should be put up as a precaution, whether it appears that it is really wanted or not, at stated intervals.

30848. Then you think the collier would clearly understand his duty?—Yes.

30849. And it could not arise afterwards that he would be blamed for setting timber where he should not, or blamed for not setting timber where the Manager said he should not?—He would have no doubt at all in his mind.

30850. I think the difficulty now is that in the absence of any precise rule, somebody in the mine must decide whether timber ought to be set or not?—Yes.

30851. It would be the duty of the collier, in order to keep himself safe, under the Rules to set his timber?—Yes.

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30852. If it is not so set he is liable to be hauled up before the magistrates ?—Yes.

30853. Do you suggest that while that is the case he may set timber in the belief that he has discharged his duty and that the official will come and knock out the timber again ?—That is the case with us now ; that has happened. Perhaps I should explain also that we have another case in which the men were out two days from the pit and refused to work. One of the causes, as we found, was—I must say that it was quite unknown when we investigated the matter, and quite outside the knowledge or instructions of the Head Manager of the collieries—that the under-officials were going round and doing this kind of thing and preventing the men standing timber on the roadways because there was payment for it, and thereby causing a great amount of danger to the men where they were filling their coal. They were refusing to allow them to put the double timber on the flats up on the coal just immediately in front of the tram, and the men kicked against it and objected to work under the changed method of working. When we investigated the matter we found that their timber had been knocked out, and they had been refused payment for it. I may say to the credit of the General Manager that he at once strongly reprimanded this man for it having been done, and said it must not be done again.

30854. You suggest that if there were one general system adopted for the whole district, it would be evident then that these men would get the timbering done, and this difficulty would not arise ?—Yes, that would be done away with. It could be settled so far as each seam or each colliery is concerned ; and I should also like the man to have power, if he thought it necessary, and if the place required that, to add to whatever timber had been put up by regulation.

30855. Of course he is supposed now to set timber to keep himself safe—that is the rule ?—Yes, but there is a continual dispute arising as to who is to determine and decide as to when a place is safe or not.

30856. Then the practice, as you say, in Wales is that if a collier considers his place is unsafe, and that it requires timbering, if the manager or the owner, or whoever he may be, comes in and differs from him, he is liable to have his timber knocked out again ?—Yes.

30857. When you were asked the question yesterday afternoon as to the fireman's duties, you said he would have to travel half a mile to three-quarters of a mile before he got in his district proper ?—Yes.

30858. That would be along the main haulage road, I presume ?—Yes.

30859. Whose business would it be to examine that road ?—Perhaps that would be allotted to some fireman who would be quite close. In some cases it would be done by one of the men who have to travel to the innermost places that I have mentioned.

30860. Have you any reason to think that they ever do examine that part ?—How can they ? It is a matter of impossibility. I want to be quite fair in this. They travel over the roadway, and if there is anything there which forces itself upon their notice, they no doubt see it and report it then ; but as to making a detailed examination of the roadway, I do not think it can be done.

30861. With reference to fines inflicted at the colliery, you have not much of that in Glamorganshire, I take it ?—Not in the Rhondda.

30862. But there is a considerable amount of fining in Monmouthshire, I think ?—So I understand.

30863. When you said in answer to Mr. Ellis that you objected, does that reflect the opinion generally of the men in the Rhondda—that they object to fines at collieries ?—Yes, they strongly object to it, because they feel it is very unfair that the manager should set himself up as the judge, jury and everything else, and that he should decide the degree of offence and also the amount of fine that a man has to pay.

30864. Of course the fine may not necessarily be for any breach of the General Rules or Special Rules, but it may be a fine which has somewhat to do with the man's work, and deductions for dirt, slack, or something of that sort ?—Yes, quite so. We have had some instances where they have been trying to introduce the practice of fining the men for so much small coal sent out, or so much dirt.

30865. With reference to the suggestion which was put to you by Mr. Cunynghame, that a key should be kept for the lamps, that is the case where the men are sending out their lamps, and where the lamps have gone out ?—Yes.

30866. The man sends his lamp out to get another ?—Yes, to get another or for it to be re-lighted.

30867. It is a case of his lamp having gone out by reason of some accident, or for some reason ?—Yes.

30868. And he must, of course, send it to some place, some lamp station ?—Yes—at the pit bottom.

30869. That lamp station would be at a place which is considered a place of safety. Of course, if the man could not send it there by someone else, he would have to tramp to the place himself in the dark ?—Yes.

30870. He is only given one lamp ?—That is all.

30871. When you said that the men complained about this, and it was suggested that there should be a key which should be kept by someone, do the men complain not because there is a key, but because there is no one there to light the lamps for them ?—The complaint is that there is no one there to attend to this work, and also there is the danger more especially to which I was referring, of the electric batteries, that boys or lads may play with them in such a way, and that in manipulating the battery they may have a flame—they may light anything with the electric flame which would be brought from the battery.

30872. So that the complaint is not that the man cannot get his lamp lit, but the complaint is that the place is left unattended, and that there is risk ?—There is that danger of the lads playing with it.

30873. (*Mr. Smillie.*) Do the miners in any part of South Wales pay for the use of the lamps or the oil ?—No.

30874. They are supplied by the owners free ?—They are supplied by the owners.

30875. Each miner who is employed at the colliery at the working face has pins or tokens to indicate which are his tubs coming to the surface ? — Generally they use chalk-marks with us.

30876. It would be quite possible for each man to have a number and for each lamp to have a number, so that each person could get his own lamp. There is no difficulty really with regard to that part of it ?—None whatever. There is a large colliery where unfortunately we had an accident two years ago, as you know, in which there is the lamp of the same number given out to the men and the numbers correspond. I mean numbers are kept for each man in that way, as you indicate.

30877. That is really done in many parts of the country ?—Yes.

30878. Do you think that the Managers of a colliery and the workmen should be the same in the eye of the law so far as offences are concerned ?—I should think they ought to be : I should think the workmen ought to have the same right to initiate an action in the Police Court for some breach of the regulations under the Act as the employers.

30879. Did you ever hear it seriously suggested that it should be left to the Mines Inspector to initiate fines against colliery Managers for breaches of the Act ?—No. It is most difficult to get prosecutions initiated at all against colliery Managers.

30880. Do you think the Home Office would be in favour of such a course as putting it into the hands of the Inspector to fine a Manager instead of prosecuting him for a breach of the Act ?—I do not think they would.

30881. Would it be a wise course to take ?—No, I do not think so at all.

30882. If that is applicable to the Manager, you say you think the same thing should be applicable to the workmen ?—That is so. I am in total agreement with this, that whatever conditions are to be observed by the workmen, the same should be observed by the employer, and whatever conditions are observed by the employer the same should be observed by the workmen.

30883. I suppose we might say that 75 per cent. of the lads in your district will in all probability find their way into the pit ?—Yes, I put it at more than that.

30884. A rather higher percentage than that ?—Yes—nine out of every ten.

30885. Mining being the staple industry there, you advocate that boys should be taught the Special Rules in the last year or two before leaving school ?—Yes, and the nature and perils of gases, and other things.

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30886. I was going to add that: would you also be prepared to go to the length of teaching them something of the nature of mine gases and the dangers of them?—Yes.

30887. You think it might tend to greater safety underground if in all mining districts that was part of the lads' education?—I do. I am very glad to think that the Glamorgan County Council are taking some slight steps towards trying to improve matters in that direction, in holding evening classes, and so forth.

30888. You think that even where a lad did not go into a pit, if that instruction were made part of his education, it would broaden his mind, and so on?—Yes, it would be useful to him.

30889. With regard to inspection by workmen, there is not much of that done in your own district?—Very little; it is almost a dead letter.

30890. But where workmen are inspecting a colliery, is it not in the power of the Manager to close up certain parts of it during the time an inspection is going to be made, or just when an inspection is going to be made, which parts he does not want the inspectors to visit?—That may be possible, but I could not say that I have known any instance of that.

30891. You have never known of it being done?—No, I have not known of it being done: but I do know that when such inspection is being carried out there is a hurrying and scurrying on the part of the under officials and the day wagemen with brattice-cloths and that kind of thing, to put up temporary doors, and so on.

30892. General Rule 38 says that they shall be entitled to inspect every part of the mine, but in the event of any portion being closed and a danger signal being on it, they would not be entitled to go beyond that?—That, no doubt, would be the construction placed upon it by the management.

30893. You say that the general conditions of a mine are safer for some time after an inspection is made either by a Government Inspector or a workman inspector because of the preparations that are made for complying with the provisions of the Act?—Undoubtedly.

30894. And if you had more extensive inspection you think that would be the normal state of the mine instead of the abnormal state of the mine?—Quite so.

30895. That is really what you aim at?—Yes, if we could continue what we look upon as the exceptional condition of the mine during the examination, and if that could be continued for all time we should be much more satisfied.

30896. Mr. Ellis put it to you that you have no fault to find with the qualifications of the present inspectors, and you said you had not. But would you add to that that had they been practical miners with their present qualification they would be better even than they are now?—Yes, undoubtedly that would be the case.

30897. You think that no person really can inspect the face of the workings so well as a miner who has spent some years of his life working at the coal face?—That is so.

30898. The question was put to you, I think, whether you could not object to Special Rules proposed by the employers when they are posted and you said "Yes." But could you really object? Have you any standing?—No, none whatever.

30899. What you really meant was that the workmen employed at the particular colliery might object?—Yes, they might object to them.

30900. Is it not the most difficult thing to get a workman who is daily employed in a mine to object to Special Rules?—It is. If they take a permanent part in that work there is always the same fear as I pointed out in the other case where the inspection is made, that the man may be dismissed.

30901. I suppose one of the chief reasons why persons claim the franchise in this country is that they want to have a voice in the making of the laws which they have to obey?—That is so.

30902.—Special Rules, when they are posted, have all the powers of an Act of Parliament?—Yes; if they are in any way broken men can be proceeded against.

30903. Most of the Special Rules are made in order to ensure greater safety?—Yes.

30904. Greater safety to whom: is it to the owner or to the Manager?—To the workmen.

30905. Is it to the workmen employed underground?—Yes.

30906. Consequently it is to the workmen that Special Rules for their safety are of the greatest importance?—Yes; and I should say that they should have some voice in the proper drafting of those rules, inasmuch as they have to live by them, and to carry them out. Then they ought to be framed in such a way that they can be carried out practically and not be a dead letter.

30907. I should like to put this point very plainly: it is not as to the individual workman in the colliery, but what you mean really is that the workmen through their organisations might be consulted in the drafting of Special Rules?—Yes.

30908. And that those men having practical knowledge, and knowing what the workmen want, might assist the employers in drafting rules for greater safety?—Yes; and it would be with greater advantage that the power could be used so as to bring about and create an inducement for the rules to be properly observed.

30909. You think that if the workmen through their leaders or advisers were consulted, and had a voice practically equal with the employers in the drafting of the rules, there would be a greater likelihood of those rules being observed?—Yes. Fewer breaches would take place than take place at present, I am convinced.

Mr. JOHN DANIEL MORGAN, called and examined.

Mr. J. D. Morgan

30910. (*Mr. Wm. Abraham.*) Do you agree with a great many of the points which have been laid before the Commission by Mr. Watts Morgan?—Yes.

30911. There are some points which concerned your district which he has not dealt with?—That is so.

30912. With regard to the question of bar-hook or trailer, you wish the use of them to be made compulsory?—Yes.

30913. You think that runaway or safety points should be used below the heaviest gradients in these slants or drifts?—Yes.

30914. Do you agree with Mr. Watts Morgan that sufficient room to walk should be provided alongside the roads?—Yes.

30915. Do you wish it to be made compulsory that no person should be appointed to ride on a journey of trams drawn by mechanical power?—Yes.

30916. Have you any special reason for that?—Yes: we have had a good many accidents arising out of riding on trams underground.

30917. Would the work be equally facilitated if that was done away with?—Yes; they have done away with them in some collieries now in our district.

30918. You say that in lowering and raising men in pit shafts, doors should be fixed on the cages so as to prevent the men falling out?—Yes.

30919. Do you agree generally with Mr. Watts Morgan with regard to firemen?—Yes.

30920. Have you any particular instances where incompetent men have been engaged?—Yes.

30921. You had two accidents in one colliery lately where men were killed?—Yes.

30922. Are you now of the opinion, since you have known of it from the inquest, and so forth, that the first of those accidents could not have happened if a practical man had been fireman there?—Yes.

30923. Perhaps you will explain to us the accident at Coegnant?—There was an accumulation of gas in a certain place and the fireman took four men on with him in order, in the first place, to raise a tram there, and in the second place in order to remove the gas. They had only two safety lamps between them, and one safety lamp was put behind the four men. The fireman was putting up canvas in order to remove the gas from the place, and it had to pass over the men and to the lamp that was behind them, and in some way or another an explosion of the gas took place, and three of the men were killed. A competent

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fireman would not remove the gas when the men were behind it.

30924. (*Chairman.*) I do not understand how the explosion took place, because as I understand, there were only safety lamps used there. Was it owing to a defect in the lamps?—We cannot say whether it was through a defective lamp or not.

30925. But you say that was a dangerous operation which a skilled workman would not have undertaken?—Yes.

30926. (*Mr. Wm. Abraham.*) In the first instance the naked light was left behind at the pit?—Yes.

30927. The colliery was worked with naked lights, to start with?—Yes.

30928. The accident took place on a Sunday night, did it not?—Yes.

30929. On that Sunday night this fireman had three or four labourers with him down the shaft?—Yes.

30930. A tram was off the rails in the heading?—Yes.

30931. And he said that he took the men there to help him raise the tram?—Yes.

30932. The fact is that he suggested they should leave their naked lights at the bottom of the shaft and he took in with him the two lamps?—Yes.

30933. The chief witness, who was the only man saved, said on his oath at the inquiry that they were put there to brush the gas out?—Yes, that is so.

30934. He himself went beyond them to put up a piece of brattice?—Yes.

30935. And the effect of the brattice he put up was that the gas came back towards these men and passed them?—Yes.

(*Chairman.*) Did the gas travel as far as the naked light: is that what happened?

(*Mr. Wm. Abraham.*) No: we do not know exactly: it is not explained yet: but an explosion took place. It was an old type of lamp, was it not?

(*Witness.*) Yes.

30936. The inspector had recommended that safety lamps should be used some time prior to that?—Yes.

30937. And they were not put there?—No.

30938. A second explosion took place in the same place?—Yes: safety lamps were introduced after that.

30939. In your opinion, would it not be a great improvement if the inspector had the power to enforce the use of safety lamps where necessary?—Yes.

30940. Are there any unskilled men, or a number of unskilled men, employed in that district?—Yes, quite a number of them in every colliery, especially in these good times.

30941. Is there a rather notorious fact connected with that explosion?—Yes: one of the three men who were killed had only been one day underground before the accident took place. He was employed first of all on the surface: then he asked the manager to go underground: he was a stranger to the manager, and he told the manager that he was a fit person to go—that he was an experienced person—but after going down the men did learn that he knew nothing about underground work: and on the following night he was killed.

30942. And it has been proved since that he was not a miner?—Yes.

30943. You would have the return airways made so that men could safely travel through them?—Yes, I believe that should be so.

30944. Have you any reason to believe that accidents could have been avoided if that had been done?—Yes. I have one special case in my mind now of an accident which took place on the 19th February last at a certain colliery in our district. The hitching plate of the tram snapped on the point of landing, and the trams ran back to the distance of 150 yards. Men were travelling up on their way home and six of them were killed. If a separate travelling road had been kept that accident would not have occurred.

30945. As it happened, there was a return airway in that case running pretty nearly parallel with the slant?—Yes, only it was too small for the men to travel in.

30946. Had it been in good repair it could easily have been made a travelling road?—Yes, very easily.

30947. Without any special extra expense?—Yes, without much extra expense: there would be a little extra expense in the beginning, but the cost of maintaining it in good repair would have been very small.

30948. Had it been in existence at the time, those men travelling through it would not have lost their lives, and the ventilation of that colliery would have been considerably improved?—Yes.

30949. I am putting the words into your mouth, but I want you to give your opinion yourself as a practical collier. That is your honest opinion?—Yes.

30950. You know that it was shown at the inquest that had that return airway been properly made it would have been an easy travelling road, and the accident, although it happened, would not have caused any loss of life?—It could not have happened if the men had had a proper travelling road.

30951. Do you think there is any inconvenience to men by having to walk out through a return airway?—No; I have walked out many a time. There is no inconvenience, only you must have the road wide enough and high enough to walk in.

30952. It is necessary to have the road made properly?—Yes.

30953. Is there anything else that you would like to emphasise?—With regard to firemen, I think their eyes should be tested. I have known some firemen who have been appointed who have had defective eyesight and were quite unable to see gas. It is very important that the firemen should see well, and that the sense of hearing should be well also.

30954. It is important that he should have no infirmity of that kind?—Yes.

30955. Do you think it is often the case that men like that are appointed?—It is very often the case that their eyes become unwell. When they are appointed as a rule their eyes are all right, but after being firemen for a number of years their eyes get bad, and they are not removed, but are allowed to keep on their employment.

30956. Do you agree with what has been said, that they should be practical men and should be proved to be so?—Yes, they should be proved to be practical men.

30957. With regard to safety lamps, how far ought the use of safety lamps to be enforced, in your opinion?—They should be enforced where gas is found in every colliery. There are some collieries—I think we have a few—shallow mines, where no gas has been found. I would not recommend safety lamps into those mines, but in any mines where gas has been found I would recommend safety lamps.

30958. (*Mr. Cunynghame.*) I understood from the last witness that as regards timbering he thought there ought to be a fixed distance for timbering in each mine, or in each seam of a mine?—Yes, I believe that is so.

30959. Is that your view also?—Yes.

30960. And that the timbers ought to be set at least that distance apart, but that the miner ought to have a right of setting them closer if he thought it expedient for safety?—Yes.

30961. You agree with that view, too?—Yes. It is the general complaint, if I may say so, in our district that the men are not allowed to put timber in the roadways except with the consent of the management. Things are carried so far in our district in some collieries that they have it as a condition in the price list—that timbers are not to be stood in the roadways except with the consent of the management.

30962. (*Chairman.*) When you speak of roadways, you do not mean only some roadways; you mean every roadway leading up to the face?—Yes, I mean every roadway. We are allowed to put timber up in the face according to our own judgment when we are not paid for them, but we are not allowed to put them on the roadways only with consent because we are paid for them.

30963. Where you are paid for them?—Where we are paid for them—only with special consent.

30964. (*Mr. Wm. Abraham.*) Only when ordered?—Yes, only when ordered.

30965. That is printed in the price lists?—That is printed in quite a number of our price lists.

30966. (*Sir Lindsay Wood.*) You said you would prohibit all riding of the men on the coal tubs on all main engine roads?—Yes.

30967. Do they run trains of men in your district? Yes, in some collieries, but not in every colliery.

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30968. Do you have many accidents on those?—Yes, we have had serious accidents from time to time. We have as many as six or seven killed at a time.

30969. Are the seams very steep?—Yes, they are all very steep; the coal is cropping. We have not got many pits in our district. The workings are reached by slants running in the coal, and the gradient is as a rule about 12 in. to the yard—perhaps more.

30970. Then when the men are riding, do they take any special precautions with those trains?—Yes.

30971. They have to take extra precautions besides those which are taken when coal only is going?—Yes.

30972. And yet they still have accidents?—We have had accidents in the past.

30973. Would not the men prefer to walk in rather than ride in?—No, they prefer to ride after all.

30974. Is it compulsory for them to ride in?—No, it is not compulsory for them to ride.

30975. Are they allowed to ride out?—Yes.

30976. Is that as they come out, or in train-loads only?—When they send the train down specially for them at the end of the shift, but the men walk up the slants.

30977. If sufficient precautions were taken to prevent accidents there would be no objection to the men riding in?

30978. (*Mr. Wm. Abraham.*) I am afraid the witness has not understood. (*To the Witness*): You mean riders who are riding on the tram up and down the slants?—Yes—men who are appointed in charge of the journey.

30979. Men who are appointed to go up and down on full tubs?—Yes.

30980. That is in full tubs. You do not object to men riding in and out of collieries?—No, we agree with that.

30981. You have not had accidents in those cases?—Yes, we have had accidents in those cases.

30982. You object to men riding on journeys of full trams and on empty trams up and down the slants. There is a man appointed by the management to ride up and down on the slants?—Yes. A large percentage of them are killed from time to time.

30983. (*Sir Lindsay Wood.*) Do you think the men who are appointed as firemen in your district are generally incompetent men?—No, I think generally they are competent men, but they are not the best and most experienced men as a rule that they can get in the colliery; they could have better men. I will not say that they are incompetent, but they are not such good men as they could get. If their hours were less and their district less and their remuneration greater, they would have better men to act as firemen, but now the best men prefer working on the coal.

30984. There are sometimes incompetent men appointed?—Incompetent so far as their eyesight is concerned.

30985. Do you consider that it would be safe for people to travel on the main return airways?—Yes, if they had the main return clear of the ropes and trams, it would be all right.

30986. But how about gas?—There is no inflammable gas in the return airways. The only drawback would be that the air is warmer in the return than in the intake.

30987. Where does the gas go to? I understand you have gas in your collieries?—Yes, there is gas found, but it is not an explosive mixture in the return airway; there is not enough quantity of gas in the air to turn it into an explosive mixture, but of course the gas is there, only it is diluted with the air.

30988. It has only to be mixed with the air to become explosive?—Yes.

30989. It is only a question of degree?—Yes, it is only a question of degree.

30990. Are safety lamps general in your district?—Yes, in about two-thirds of the collieries.

30991. Are the other parts non-gassy mines?—Not the whole of them; some of them are.

30992. (*Mr Ratcliffe Ellis.*) You say you do not suggest that lamps should be put in mines where there has been no gas seen?—Yes, I say that.

30993 If gas is seen in however small a quantity—a blower, for instance—would you then say that lamps should be compulsorily introduced?—Yes.

30994. However small a quantity of gas there was?—However small a quantity of gas, they should be introduced.

30995. Then when once safety lamps are put into the mine would you ever allow them to come out again if gas was not seen say for 12 months?—No, once put in I think we should stick to them, because seeing gas once it may be seen again.

30996. (*Mr. Enoch Edwards.*) You say in your statement that rubbish produced by falls and otherwise should be stowed underground so far as possible. Of course the object of this Commission is to find a remedy for accidents. What relation has this point to accidents?—The rubbish is sent out now when it ought to be sent into the faces in order to fill up the gobs—in order to support the roof in the first place, and in order to shut up all vacant places so that there should be no room for accumulation of gas. Now it is sent out in some of our collieries because it is more convenient to send it out than to convey it to the faces when it should be sent there to fill them up.

30997. There may be falls, so that of course it is very difficult to carry the rubbish into the faces?—There might be extra difficulty in dealing with it, but I think after all that rubbish is sent out to the surface that could be dealt with underground.

30998. You are dealing now with cases where an attempt is made by the management to keep up the roof always?—Yes.

30999. Of course you are aware that in a large number of collieries the object is to break the roof in and to send it back to the goaf?—Yes.

31000. So that there is nothing gained there?—In our district the management always attempt to do the packing as tight as possible in order to support the roof; we do not want the roof to break down at all.

31001. You are suggesting that in your view where it could be done this rubbish should be taken back and packed into the waste?—Yes.

31002. I am only putting it to you that that is not the view in collieries generally?—I am only speaking of our own district.

31003. You said in answer to Mr. Ellis just now that safety lamps should be used in any pit where gas has been found?—Yes.

31004. Explosions have happened at many collieries where gas has not been seen?—Yes.

31005. Have you had any experience of explosions?—Yes.

31006. Where candles have been used?—Yes.

31007. Has gas been found in those mines before the explosion?—Yes.

31008. Did you ever hear of a case where an explosion has happened and the men have said that gas was in the pit. Are they not usually up to that time the safest pits? Did you ever hear of one where gas was found before?—Yes, I have heard of one colliery in our district where an explosion took place and where no gas was ever found or reported in that colliery before.

31009. Does that not rather suggest that there should be safety lamps in all pits?—I will not go so far as to say that. That was only an exception.

31010. At any rate, you think that if gas has been found, safety lamps should be put in?—Yes.

31011. And that once in they should stop in?—Yes.

31012. (*Mr. Smillie.*) Have you had personal experience of working with candles in a naked light pit?—Yes.

31013. You have also had personal experience of working with the close lamp?—Yes.

31014. Do you think a workman has more light with a candle than he has with a close lamp?—Yes, a much better light.

31015. Do you think a workman can look after his safety, so far as the nature of the roof and sides is concerned, better with a naked light than with a close lamp?—Yes.

31016. It is more easy to examine and find defects in the roof?—Yes.

31017. If that is so, does not the safer light, because of the nature of the close lamp itself, tend to a large number of accidents from falls?—Yes.

31018. And even haulage accidents where the light is not so good?—Yes.

31019. In view of that, if that is so, do you set the danger of an explosion against the greater safety of naked

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lights ?—Yes: where gas is found the danger from explosions after all is more than what is gained by using naked lights.

31020. Could not the danger from gas be largely minimised by improved ventilation in some cases ?—Yes, it could be minimised.

31021. Is there not a tendency, where safety lamps are used, for the management to feel that there is less danger, and thus sometimes is not less attention paid to ventilation than ought to be paid to it ?—No, I do not know of that.

31022. With regard to stowing the rubbish underground, your real object is to prevent reservoirs for gas ?—Yes.

31023. The goaf at the present time is very often a reservoir for gas, if there is gas in the pit ?—Yes.

31024. You think that so far as possible the goaf should be solidly stowed up so that gas could not accumulate ?—Yes.

31025. Is it your opinion that many of the large explosions which have taken place may have arisen from reservoirs of gas in the waste ?—Yes, I believe that to be so.

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31026. And that if the waste had been properly stowed up there would have been less likelihood of a large accumulation of gas and consequently a serious explosion ?—Yes.

31027. That is the real reason why you advocate that the waste should be thoroughly stowed up as far as possible ?—Yes.

31028. (*Mr. Ratcliffe Ellis.*) Do you suggest that stuff should be taken down the pit to fill it up, or that they should utilise the débris that is in the pit ?—Utilise the falls that are in the pit and put them in the goaf.

31029. Not that stuff should be taken down ?—No, I do not go so far as that.

31030. (*Mr. Smillie.*) I suppose you would not object to stuff being taken down the pit should it be necessary to fill up the goaf, but you do not advocate that at the present moment ?—No, I would not go so far as that: it may be a good thing in certain cases to do it where rubbish could be had and where it was needed underground.

31031. (*Mr. Wm. Abraham.*) You know it is being done in some cases ?—I have heard that it has been done.

Mr. William Evan Morgan, called and examined.

Mr. W. E. Morgan

31032. (*Mr. Ratcliffe Ellis.*) I see that you say in your statement you think there should be better protection to examiners appointed by the workmen, and also that there should be power to appoint check weighers as examiners. What do you mean by that ?—As Mr. Morgan has stated already, there is no protection for the examiners under the present Act, although there is a provision in the Act to appoint persons to inspect the mines monthly. But only a few of the collieries avail themselves of the power to appoint them, the reason being that if they report they are open to dismissal in some way or other for giving a bad report; and I was thinking that, inasmuch as a checkweigher is not dependent upon colliery owners, if the men desired to appoint him to examine the place he would be independent, and the company of course could not dismiss him.

31033. But he is absolutely dependent upon the workmen. Is he an unbiassed man to make such an inspection ?—The majority of the checkweighmen are, I think, unbiassed.

31034. Do you think that the Inspectors of mines are biassed ?—No, I do not think so, from my experience.

31035. You do not think that because they are drawn from a particular class they have any bias at all ?—No, I do not think so.

31036. You think the checkweigher would be a suitable person to go and make this examination ?—I believe so, because he is independent of the colliery owners: that is the reason I suggested it.

31037. A checkweigher has certain work to do under the Act of Parliament, and he is not entitled to interfere with the management of the mine, except as to settling the deductions for dirt ?—Yes, I know that.

31038. You want to alter that ?—If we could alter the Act and amend it in such a way to give the necessary powers to the checkweighmen.

31039. What you want to do is to alter the Mines Act and to make a checkweighman independent, and that then he should be eligible for one of these appointments ?—Yes.

31040. You say further on in your statement that unskilled workmen are the cause of many accidents. What character of accidents do you consider are due to unskilled workmen ?—They come into the mines from every part and they have no knowledge at all of mining.

31041. What sort of accidents do you think are due to the employment of unskilled workmen ?—They are sent to do many things, and are a source of danger to others because they are not skilled.

31042. But what sort of accidents do you attribute to the employment of unskilled workmen ?

(*Mr. Enoch Edwards.*) Do you refer to their working in the face ?—In the face and on the roads, and with regard to safety lamps.

31043. (*Mr. Ratcliffe Ellis.*) At the face what unskilled workmen are employed ?—Sometimes they are sent into the face to unload rubbish.

31044. Have you any statistics to show that when those unskilled men are sent into the face accidents result ?—No, I have not any statistics.

31045. Have you any evidence of any sort or kind to put before the Commission in support of this view ?—No, it is my opinion.

31046. You have no evidence of any sort or kind in support of that ?—Mr. Morgan has given evidence about filling the gobs. By night at some collieries these men are sent into the face and they unload the rubbish in order to fill the space.

31047. Have you any sort of evidence that you can put before the Commission to show that accidents have resulted from the employment of unskilled workmen ?—It is difficult to ascertain facts.

31048. Can you answer my question: have you any evidence ?—No, not now. I should like to explain: an unskilled workman, or a man coming direct to the colliery with no previous knowledge, is sent to the rubbish holes, and those places are most dangerous. We cannot always of course ascertain the real cause of accidents, but we surmise that a lot of explosions have happened owing to those men.

31049. It is a fact that you have no evidence of any sort or kind to put before the Commission in support of this view of yours. It is your opinion, as you say ?—Yes, it is my opinion.

31050. But I understand you to admit that you have no evidence of any sort or kind to put before the Commission in support of it ?—No, I have no statistics whatever.

31051. You go on to deal with inaccurate plans: you say that there should be an independent person to make a survey; and that cases are known where collieries have been worked beyond the boundaries which are not shown in the plans. What has that to do with safety ?—I think it has a lot to do with safety, if colliery owners work beyond their proper boundaries and it is not marked on the plan, and especially if they are working down to the dip and other people are coming to work the barrier afterwards—they will strike into the water or old workings.

31052. But then, so far as water is concerned, I suppose you know that there are provisions made by which you must bore in advance. That is provided for and you are not dependent upon the plan for that ?—No.

31053. (*Mr. Wm. Abraham.*) Do not say "no" before you understand the question, because you have a case to prove that lives were lost notwithstanding boring being done, and lives were lost because of the inaccuracy of the plan ?—Yes.

31054. (*Mr. Ratcliffe Ellis.*) What alteration do you suggest should be made ?—I only give it as a suggestion; I think an independent party, an inspector, should have the power to test whether these plans are made accurately. That is the only thing I suggest. We had a case the other day where they had been working over the boundary for nearly nine years. Four lives were lost at a colliery called Caradog Vale through striking into water. No plans available.

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31055. (*Mr. Wm. Abraham.*) And there was also a case in Glenavon?—Yes, Glenavon Colliery, Cymmer.

31056. (*Mr. Ratcliffe Ellis.*) You know there is a provision in the Act of Parliament with reference to plans now. What alteration do you suggest should be made in that provision?

31057. (*Mr. Wm. Abraham.*) You want some independent man to make the plans?—Yes, periodically.

31058. (*Mr. Ratcliffe Ellis.*) Do you mean some person who is paid by somebody other than the employer?—Yes, certainly.

31059. By whom should he be paid?—By the Government. In my opinion the inspector should have the power to appoint the person.

31060. And that he should be paid by the Government?—Yes, paid by the Government.

31061. (*Mr. Wm. Abraham.*) You would not want that in every colliery, but you come from a district where lives have been lost and the jury have found in one case that it was by reason of the want of plans?—Take the last case I have referred to, where they have been working for nine years across the boundary and where according to the plans that place was solid coal; there was nothing to indicate that the coal had been worked.

31062. (*Mr. Cunynghame.*) With regard to this question of plans, the law is that the owner or agent should keep in the office an accurate plan of the mine. Is that so?—Yes, that is the law.

31063. Now what you want is, I suppose, that there should be some means of securing that the plan is an accurate one?—Yes.

31064. If the law is at present that the owner should keep an accurate plan, I suppose that the inspector would have power, in a case in which he thought the plan was inaccurate, to order him to make it accurate?—Yes.

31065 Is that not enough?—No.

31066. What you want is an accurate plan, and that is quite right?—Yes—something reliable.

31067. If the law is that the owner is bound to keep an accurate plan and that the inspector has power to keep him up to his work, is that or is that not sufficient? If not sufficient, I want to understand why?—According to the Act, it is all right—if they would carry out its provisions. In the case I mentioned they had been working for nine years, and the plans were inaccurate.

31068. If nobody knows whether the plan is accurate or not how is the matter to be put right. What would you suggest?—By giving power to the inspector to send a surveyor occasionally to these collieries, and colliery owners then would be on the alert.

31069. That is what I want to come to. Do you mean that you would have every single colliery planned from time to time to see whether the plans were accurate or not?—Yes.

31070. Or do you mean that you would only have that done where there was a suspicion that the plan was inaccurate. Which of the two?—For the inspector to act according to his own discretion; for him to have power, if he thinks that it is necessary, to send a surveyor to make a survey.

31071. That is what I want to understand. You do not propose, as I understand, a re-making of plans by the Government, of every colliery in the Kingdom?—No, nothing of the kind.

31072. (*Mr. Ratcliffe Ellis.*) You say further in your statement that there is defective ventilation in shallow mines?—Yes.

31073. What is the meaning of that?—Our district is differently situated to other districts; we are working shallow seams, and shallow mines are worked; it is not the same as in the Rhondda. In those shallow mines there is no gas found, and owing to that the ventilation is neglected.

31074. You know General Rule 1?—Yes.

31075. That rule not only obliges ventilation to be complete where there is gas, but where there is any noxious vapour. It provides: "An adequate amount of ventilation shall be constantly produced in every mine to dilute and render harmless noxious gases to such an extent that the working places of the shafts, levels, stables, and workings of the mine, and the travelling roads to and from those working places shall be in a fit state for working and passing therein."—Ye .

31076. It is because that General Rule is not carried out that there is defective ventilation?—Yes. There is too much work for the inspectors; they cannot go to these collieries.

31077. Is that the case in all the mines in your district?—Not in all of them.

31078. Who is the inspector of the district?—Mr. Dyer Lewis.

31079. You think that he does not see sufficiently that General Rule 1 is carried out?—As I have said, they cannot go to all these collieries; they have too much work.

31080. (*Chairman.*) Can you mention any particular cases of shallow mines in which you say that occurs. I do not wish you to mention them to us now so that the names should be taken down, but will you mention cases to the secretary afterwards?—There are mines in our district that depend upon natural ventilation, and it depends entirely how the wind blows. I have been in those mines myself, and the candle could not burn in them.

31081. We should like to know where that takes place. Will you give some names to the secretary in confidence?—I will mention one name now: Cwm Gelly Colliery.

31082. (*Mr. Ratcliffe Ellis.*) Your complaint is that the General Rule is not being observed in some collieries?—Yes.

31083. (*Chairman.*) You say there are certain shallow collieries where Rule 1 as to ventilation is not observed?—Yes, a large number.

(*Chairman.*) You can either give the names of those collieries to the Commission to be published, or if you like you can give them privately to the secretary—whichever you prefer.

(*Mr. Wm. Abraham.*) He has named one.

31084. (*Chairman.*) Do you object to that name being taken down and put in your evidence?—No, I have no objection. It is Cwm Gelly Colliery.

31085. (*Mr. Ratcliffe Ellis.*) How many men are employed at that colliery?—About 20.

31086. Does that state of things apply generally in your district?—No, it is not general.

31087. Are there other collieries besides the one you have named in which that state of things exists?—Yes.

31088. Perhaps you had better give the names to the secretary?—Some of them have been abandoned.

31089. Will you give the names to the secretary?—Yes.

31090. You say that the inspector should analyse the air?—Yes.

31091. You do not mean that he should measure it?—Measure and analyse it.

31092. But why the inspector?—I only suggested the inspector. I have no objection to another person analysing it, but I think the air ought to be as pure as possible.

31093. You think it should be analysed?—Yes, in order to ascertain its quality.

31094. How often would you provide that the air should be analysed?—I think once in 12 months at a colliery would be sufficient, because the management would take more care after the custom is established.

31095. When you speak of the inspector, you mean that somebody should analyse the air?—Yes, somebody with authority to deal with the matter.

31096. You think once in 12 months would be sufficient?—Yes.

31097. You say in your statement, with regard to safety lamps, "I would not advise the use of safety lamps at all collieries, only where the roof is brittle better ventilation and more thorough supervision is necessary. Lamps would be a source of danger where bells are numerous in the top, &c." What are "bells"?—"Pans" in the roof with smooth surface.

31098. Crevices from which big stone might come down?—Yes. You cannot easily detect them with safety lamps.

31099. Is your objection to the use of safety lamps in that case that you cannot examine the roof because the light is not sufficiently good to examine it by?—Yes.

31100. And that a torch would give you a better light?—Yes, especially if the roof is good. We have now a case in point.

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31101. Do you think there cannot be an examination made sufficiently with a safety lamp?—No, not so thoroughly as with naked lights. Another thing is this: at a certain colliery there was a slight explosion recently, 20 years have elapsed since the last slight explosion happened. The men went out on strike for a month; they preferred to risk the gas than risk the "bells."

31102. Do you encourage that view?—Yes.

31103. You say they found gas and they put safety lamps in one colliery, and the men went on strike for a month?—Yes, owing to the "bells" in the roof. They thought that the "bells" were a greater source of danger to the men than the gas.

31104. And that met with your approval?—Yes, I have had experience of "bells." They are very treacherous.

31105. What was the end of it?—In the end a deputation waited upon the inspectors, and the inspectors went and examined the place themselves, and they upheld the view of the men.

31106. Then lamps were not introduced there?—That is so.

31107. (*Mr. Wm. Abraham.*) In your district you have had two or three instances whereby you are convinced that if correct plans had been available accidents would have been avoided?—Quite right.

31108. Let us come back to Glenavon. That is a case of re-opening an old colliery?—Yes, driving towards an abandoned colliery.

31109. Where no plans were available at all?—No.

31110. And water came in from an unexpected place?—Yes, it broke down through the roof.

31111. I want you to prove this case. Do you remember the investigation that we had there?—Yes.

31112. No fault was found or could be found with those managing it at the time?—No.

31113. When we asked for the old plans they were not to be found at all?—No.

31114. Hence that is one of the reasons why you think a correct copy of the plans of abandoned mines should always be kept available?—Yes.

31115. That was Glenavon?—If you remember rightly, there was an overlap. They were following the coal, and where they struck the water they were under the old workings; and they were boring, and the water broke down from the roof.

31116. That was distinctly because no plan of the old workings was available. That was the opinion at the time?—Yes. I should like to suggest this, not only plans but there ought to be something to indicate the nature of the strata at the time when they are stopping the colliery.

31117. That is a question of detail. It is important to agree on a principle. I daresay the Home Office will look after the question of detail as much as is necessary. How many lives were lost in Glenavon?—Five.

31118. You understood that was distinctly because there was no plan available of the old colliery, and notwithstanding that the men did all that they were expected to do, this accident happened and five lives were lost. Take Caradog Vale Colliery: what happened there?—They struck the water in old workings.

31119. That, again, because there were no plans available?—Yes.

31120. No recent plans. That was so?—Yes.

31121. Three or four of the men present can testify to that if it is necessary.

31122. (*Dr. Haldane.*) Were they working with boreholes in advance?—Yes. I drew a rough sketch. It is possible to strike into the water and comply with the law, from my own experience.

31123-4. (*Mr. Cunynghame.*) What was the date of those abandoned plans that were imperfect? There has been a great improvement of late years in abandoned mine plans. It may be a very old case, and that is important?—I am not able to say.

(*Mr. Wm. Abraham.*) Mr. David Morgan would be able to tell us the last case.

(*Mr. D. Watts Morgan.*) It would be within 12 years in the case of Caradog Vale.

(*Mr. Wm. Abraham.*) It would be well within 20 in the Glenavon case.

(*Witness.*) Yes.

(*Mr. Cunynghame.*) Something has been done to amend the law since those bad plans were delivered. That is the point. In the Act of 1896 there is considerable improvement, possibly not enough; the rules as to abandoned mines have been made much stricter, and these old plans, of which complaint is justly made, were before the Act of 1896.

31125. (*Chairman.*) Since the Act of 1896 the law with regard to the plans of abandoned mines has been much more stringent, I understand?—Yes.

31126. You are aware of that?—Yes.

31127. Have you any fault to find with the law as it stands in 1896? Do you know the provisions of the Act of 1896?—No, I do not remember them at present, but I have a suggestion to make when working towards the boundaries. My suggestion is to bore sufficient holes in the barriers when these workings are abandoned, especially when they are working to the dip.

31128. (*Mr. Wm. Abraham.*) I think you are also in your district strongly in favour of a second enquiry after these accidents have happened?—Yes. Second enquiries would be appreciated.

31129. The putting in force of what is in the Act already would meet the requirements, you think?—I believe so.

31130. In the case of Caradog Vale there was a prosecution?—Yes.

31131. Did it fail?—I believe there was a verdict of manslaughter against the manager.

31132. The coroner's jury brought in a verdict of manslaughter?

(*Mr. D. Watts Morgan.*) That is so.

(*Mr. Wm. Abraham.*) These are points essential to be brought out. I did not like to keep Mr. David Morgan too long. The Home Office undertook a prosecution against these men?

(*Witness.*) Yes.

(*Mr. Wm. Abraham.*) And the prosecution failed.

(*Mr. D. Watts Morgan.*) For the reason that the same evidence was not tendered at the Assizes at Swansea that we had at the inquest before the coroner.

(*Mr. Wm. Abraham.*) The fact was this, that even the manager was not compelled to stand to the evidence that he gave before the coroner, and other witnesses.

(*Mr. D. Watts Morgan.*) Yes, and other witnesses as well.

(*Mr. Wm. Abraham.*) So that the intention of the Act of Parliament to correct these evils failed?

(*Mr. D. Watts Morgan.*) That was so.

(*Mr. Wm. Abraham.*) Whereas had the coroner's inquest power to order a prosecution, or indeed to call a second enquiry from the Home Office, it would be an easy case to prove negligence on the part of the officials, the manager and the part-owner.

(*Mr. D. Watts Morgan.*) Yes: in that case I believe the prosecution would have been successful.

(*Mr. Cunynghame.*) I have not followed that properly. What is the complaint?

(*Mr. Wm. Abraham.*) The point is that the coroner's inquest brought a verdict of manslaughter against the manager and the owner.

(*Mr. Cunynghame.*) No, they found them guilty of culpable negligence, and the coroner saying that amounted to a verdict of manslaughter, the jury assented. What was the next thing?

(*Mr. Wm. Abraham.*) You ordered a prosecution.

(*Mr. Cunynghame.*) No, the Director of Public Prosecutions; Kingdon and Quinton were committed for trial and tried for manslaughter before Mr. Justice Jelf at the ensuing Assizes, and they were acquitted. What is the complaint? Is it that the jury acquitted them, or Mr. Justice Jelf, or who?

(*Mr. Wm. Abraham.*) The complaint is this: I think it is as well to have it down.

(*Chairman.*) Somebody will tell us what it is they complain of. It is better not to come from you, but from one of the witnesses.

(*Mr. Wm. Abraham.*) The case is this, that on the evidence given before the coroner's jury these men were found guilty of manslaughter.

(*Witness.*) Yes.

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Mr. W. E. Morgan
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31133. (*Mr Wm. Abraham.*) When prosecuted at the Assizes in Swansea the case against them broke down?—Yes, they were acquitted.

31134. Other evidence was also allowed to come in.

(*Mr. Cunynghame.*) How on earth could you have prevented it?

31135. (*Mr. Wm. Abraham.*) In your opinion if the coroner and his jury had power to order a prosecution they would have done it?—Yes.

(*Mr. Cunynghame.*) But they did. You can indict when a coroner's jury finds a verdict of manslaughter. You indict on that straight away. It is equivalent to the finding of the Grand Jury, and the indictment takes place with the Director of Public Prosecutions. The coroner's jury could do no more, and do no less. What is the complaint?

(*Mr. Wm. Abraham.*) What we try to suggest to you is this: if they had the power of punishing they could say what punishment was due to these men. They would evidently have done it there and then. Or if we had power to demand a second investigation under the Act.

(*Mr. Cunynghame.*) You could not punish a man. That would be out of the question. You could only enquire. You can do no more than prosecute.

(*Mr. D. Watts Morgan.*) May I explain that they were not tried in any way to this evidence at the Assizes at Swansea, and the man was not compelled to give evidence against himself: therefore the prosecution fell through on that ground. That is what we complain of.

(*Mr. Cunynghame.*) Your complaint is this, that in the case of a mining prosecution a man is not compelled to give evidence against himself. Is that your complaint? Do you want a change in the law?

(*Mr. D. Watts Morgan.*) We cannot put the evidence in before the Court as against him.

(*Mr. Cunynghame.*) Do you complain that the man is not compelled to give evidence against himself?

(*Mr. D. Watts Morgan.*) Yes.

(*Mr. Cunynghame.*) Is that the complaint?

(*Mr. D. Watts Morgan.*) That is one form of the complaint.

(*Mr. Cunynghame.*) I will investigate that form of complaint. I suppose you know as a principle of English law that no man is compelled to give evidence against himself on a criminal matter.

(*Mr. D. Watts Morgan.*) I quite follow that.

(*Mr. Cunynghame.*) You propose an exception should be made to that rule in the case of mining prosecutions?

(*Mr. D. Watts Morgan.*) We ask that unless the coroner's jury——

(*Mr. Cunynghame.*) Do you or do you not?

(*Mr. D. Watts Morgan.*) Unless the coroner has power to inflict punishment on the man.

(*Mr. Cunynghame.*) Would it not be better to answer the question first. Do you propose a man should be compelled to give evidence against himself—I do not think you do: I should think it unlikely, but still, do you?

(*Mr. D. Watts Morgan.*) No.

(*Mr. Cunynghame.*) What is the other complaint on this prosecution?

(*Mr. D. Watts Morgan.*) The complaint is that there ought to be some further enquiry with regard to this matter, and as the result of that enquiry, if he was found guilty, he should be punished.

(*Mr. Cunynghame.*) Do you mean that after a prosecution and an acquittal by a jury there should be a second trial?

(*Mr. D. Watts Morgan.*) Before that.

(*Mr. Cunynghame.*) Do you mean a man should be punished except by a jury of his own countrymen—tried at Assizes without a jury?

(*Mr. D. Watts Morgan.*) No, in the form of enquiry we suggest that would not be so.

(*Mr. Cunynghame.*) If you had the enquiry you suggest it would not be able to punish him. He could not be punished by the persons conducting that enquiry. Do you suggest that he should?

(*Mr. D. Watts Morgan.*) He may not be punished in the sense you look upon it, but something would be done in order to correct the offence that had been committed, which is not the case now.

(*Mr. Cunynghame.*) How would you correct it by punishing him? You use the word "correct."

(*Mr. D. Watts Morgan.*) The publicity given to it would be the means of preventing another occurrence of the same kind.

(*Mr. Wm. Abraham.*) You should have power to take his certificate from him.

(*Mr. Cunynghame.*) There is that power if he has the certificate.

(*Mr. Wm. Abraham.*) It is not a question of sending a man to gaol. It is a question of preventing a negligent man managing men again.

(*Mr. D. Watts Morgan.*) That is one point. So far as Mr. Kingdon is concerned now there is nothing on his certificate to prevent him managing a colliery if an owner cares to give him an appointment.

(*Witness.*) Could there not be an enquiry when serious accidents happen? Could not the Government step in and hold an enquiry?

31136. (*Mr. Wm. Abraham.*) Is it not our complaint in South Wales on several occasions that we have failed to move the Home Office to put in force the power that they have under the present Act to investigate the conduct of these men whose negligence has been the cause of the loss of life?—Yes, that is the complaint.

31137. That is our point. It is not a question of punishing these men in the sense of criminal punishment, but a question of preventing a negligent man managing again until he has given proof of his ability to become a manager of our men?—Yes, and when the inspectors take a case into Court they lose very often.

31138. Are you of opinion than an inspector loses a great deal of influence in the district when he is not able to enforce his orders?—Yes, and in other districts as well.

31139. It is the opinion of South Wales miners and the opinion of South Wales leaders that the failure of these prosecutions reduces the power and the influence of the Government inspectors in that part of the country?—Yes, it has a tendency to discourage them from taking cases into Court. I could cite another case.

31140. I am just going to give another case. Take Gowerton, the Elba Colliery case. Is not that a similar case, where the coroner's jury found the manager in fault and the cause of the death of the men under him?—There was an error of judgment on the part of the official. The under-manager, I believe, it was, if I remember rightly.

31141. That would be a very mild way of putting it?—Yes.

31142. Misplacement of a pipe instead of effecting a cure created evil?—Yes.

31143. The inspector took the matter up?—Yes.

31144. And a prosecution was entered against him?—Yes.

31145. It was lost?—It was the opinion of the inspector that he had a clear case against the management.

31146. You were laughed at in Court?—Yes.

31147. Have you any opinion of your own or your fellow officials there as to why that prosecution failed?—Other evidence was given at the Court than what was given at the enquiry, and I believe it happened that they had a sympathetic Bench. That is the opinion of all the miners, and the public.

31148. One of the magistrates was an old colliery proprietor?—Yes, there was a colliery proprietor on the Bench at the time.

31149. (*Chairman.*) A colliery proprietor was one of the magistrates? There were some colliery proprietors on the Bench?—Yes, on the Bench at the time.

(*Chairman.*) Ought they to be on the Bench?

(*Mr. Cunynghame.*) What were their names?

(*Mr. Wm. Abraham.*) They were retired from business.

31150. (*Chairman.*) They were people whom, in your opinion, were likely to be biassed?—Yes.

31151. As having been once colliery proprietors?—There would be an inclination, of course, on their part to agree with their own side. That is human nature.

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31152. (*Mr. Cunynghame.*) I should like to take those two points up. Take the first case: that was an inundation of water at the Caradog Vale Colliery, the one you first spoke of?—Mr. Watts Morgan is more versed in that case than I am.

(*Mr. Cunynghame.*) We will not ask you anything about that.

(*Chairman.*) Would you like to ask the other Mr. Morgan?

(*Mr. Cunynghame.*) Yes. What, and against whom, is the complaint with regard to this Caradog Vale case? Is it against the law or against anyone?

(*Mr. D. Watts Morgan.*) In the first place perhaps we should have to deal with the manager. Something ought to be done in respect of his certificate. He holds his certificate to-day, and there is nothing to prevent him getting another post. The only thing is if the owner does not care to employ him because of his connection with that place. In the eye of the law he is as competent to manage a colliery as at any time.

(*Mr. Cunynghame.*) Supposing application were made, as can be made under the Act, to take away his certificate, I suppose he would plead the acquittal of the jury, that they had heard the case and acquitted him?

(*Mr. D. Watts Morgan.*) I daresay he would.

(*Mr. Cunynghame.*) Still, the matter can be enquired into, I presume?

(*Mr. D. Watts Morgan.*) Yes. That is one of the reasons why we are seeking for this court of enquiry. That court of enquiry would be a competent authority to enquire into all the circumstances, and better than the jury at an Assize Court, because it would be able to understand the value of the offence committed.

(*Mr. Cunynghame.*) I agree, but at the same time there is no punishment you would propose to inflict where he has been acquitted, other than taking his certificate away?

(*Mr. D. Watts Morgan.*) No.

(*Mr. Cunynghame.*) What is your complaint in this case? You do not complain of the law?

(*Mr. D. Watts Morgan.*) I think proceedings should have been taken against him with regard to the cancellation of his certificate.

(*Mr. Cunynghame.*) I will take the second case—the Elba Colliery at Gowerton. They were prosecuted, were they not?

(*Witness.*) Yes.

31153. (*Mr. Cunynghame.*) What more do you say ought to be done in that case? How ought the law, or the administration of it, to be strengthened, or anything else?—I do not know. We are only stating facts. I had a conversation with Mr. Robson, and he was of opinion that a conviction ought to have been made in that case.

31154. That is not an answer—what conversation you had. I am asking what could be done. We are here to see what can be done in these cases. What more do you say could be done, or could be done in that case? It is for you to make suggestions?—An independent Court. I think when something happens on the sea, a shipwreck, or something of that sort, there is a Court of Enquiry. Could we not have something in connection with the mines independent of magistrates?

31155. You are aware under Section 45 an enquiry can be ordered? Do you know Section 45 of the Coal Mines Regulation Act?

(*Chairman.*) Would that be a satisfactory thing supposing that enquiry was put in force? Would it be a satisfactory kind of enquiry, the enquiry such as that under Section 45?

(*Witness, after perusing the Section.*) The only thing needed is to put this in force.

31156. (*Chairman.*) Your complaint is that the Home Secretary did not act under Section 45 and order another enquiry?—Yes.

31157. You think he ought to have ordered another enquiry, and that that would have been better than a prosecution?—Yes.

31158. The prosecution failed, and you think the enquiry might have done some good?—Yes.

31159-60. (*Mr. Cunynghame.*) What result would the enquiry have arrived at?—I think if an enquiry were held, competent persons could be appointed to deal with the question, and not leave it to magistrates without knowledge of mining to decide.

31161. (*Chairman.*) I understand the position of the witness to be this: he thinks it was a mistake to order a prosecution, and it would be better if the Home Office had ordered an enquiry under Section 45?—That is what I think.

31162. (*Mr. Cunynghame.*) I should think we should have been guilty of a grave dereliction of duty if we had not ordered a prosecution. You think there should have been no prosecution in that case?—After the case had been fully enquired into to decide whether a prosecution would benefit or not.

31163. (*Chairman.*) You would have the enquiry under Section 45 first, and according to the result of the enquiry you think the Home Office ought or ought not to have ordered a prosecution. You think the enquiry ought to have taken place before the prosecution?—Yes.

31164. That is the point, as I understand it?—And when the inspector goes with these cases before magistrates and loses them, it discourages him.

31165-6. (*Mr. Wm. Abraham.*) I think you agree with Mr. Morgan with regard to the additional inspectors being appointed?—I do. I should like to point out the difference in the Western District of Glamorgan, or South Wales. There are so many small collieries that it is almost impossible for the inspectors to do their duty properly. I know, because I live close to them, and they are away early in the morning and late at night, and there are so many accidents; they make enquiries at the collieries and attend inquests, and it is impossible for them to perform their duties properly. We have hundreds of small collieries isolated in the hills, and it is very difficult to go there. It is not the question of the number of men working at the collieries, because we have collieries from 4 to 500, and in our own district we have collieries large and small, and it takes as much time to visit a small nearly as a large one.

31167-8. When you said "hundreds of collieries" you meant a large number of collieries in the hilly district?—A large number.

31169. You agree with Mr. Watts Morgan with regard to working-men inspectors?—Yes.

31170. Have you anything now to add to what he said with regard to the necessity of them?—No, I have nothing to add. I endorse what he has said.

31171. Do you agree with him as to what he said about firemen's duties?—Yes.

31172. The firemen's districts?—Yes. I could cite many cases, but I should like to add one thing. We know of firemen that are not able to write, and I have one in my mind who, when he was making his report, could not make the report himself, and the weighman or somebody else wrote in lead and he had to follow, and that was the way he was signing the books. There was a case the other day when a fireman admitted before the coroner that he could not write. I think some sort of examination should take place before a fireman is appointed.

31173. To prove whether he is competent or not?—Yes, competent, and to have the approval, in my mind, of the mines inspector before he commences his duties.

31174. You think, then, that in addition to the manager having the right of appointing him, he should in a sense appear before the mines inspector to satisfy the mines inspector that he is qualified?—That he is qualified for the post.

31175. One of the qualifications added to the other practical requirements would be that he is able to write his own report?—Certainly.

31176. Do you know more than one case where men so appointed are not able to make their own reports?—I know of about four or five cases; when accidents occur things are disclosed, and then they are reduced to the ranks. I want these men to be qualified before being appointed.

31177. (*Chairman.*) The managers of the mine do not know that these people cannot write when they are appointed. They would not knowingly appoint a fireman who could not write. They find out by an accident happening and an enquiry taking place?—Yes.

31178. How do these reports get before the managers? Somebody writes them for the firemen?—Somebody writes, and they follow with ink, with a pen.

31179. (*Mr. Wm. Abraham.*) This is one of the serious complaints we have to make where incompetent men are appointed, is it not?—Yes.

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Mr. W. H. Morgan
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31180. (*Chairman.*) The blame of that rests not so much with the management, who do not know about it, as with the persons who recommend these incompetent firemen to the management. Who would they be?—As a rule from what I know, a large number of these firemen are appointed because they are friends of the managers and overmen.

31181. The management does not know very often. The under-managers do it without the knowledge of the principal manager?—I do not know who appoints them, but we can gather when a person is appointed whether he is a friend of the officials or not.

31182. If you find out a case of that sort I should think it was your duty to report it at once to the inspector of mines, and that the inspector of mines ought to deal severely, or see that the management dealt very severely, with anybody who recommended a man who could not write a report.

(*Mr. Wm. Abraham.*) In a small colliery a manager would know his men.

(*Chairman.*) I think the witness said the manager did not know, and only found out very often by some accident taking place.

(*Witness.*) The way we find them is when we are attending the inquests.

(*Mr. Smillie.*) The witness meant when publicity was given to it the person was reduced.

31183. (*Chairman.*) Very often the manager, the witness says, does not know that this fireman was incapable of writing the report. I want to know who is really responsible for appointing a man who does not know how to write, because he ought to be severely dealt with?—It depends on who has the power to appoint these men, the under-manager, the overman or manager.

31184. Whoever recommended a man to be appointed as a fireman and knew that the fireman could not write ought to be dealt with severely?—We had a case the other day.

31185. (*Mr. Smillie.*) Do you suggest that the manager did not know?—I do not doubt that. When the case was investigated—there was a fatal accident—in his evidence he admitted that he could not write, and the mines inspector, Mr. Dyer Lewis, said "You will not act as a fireman again."

(*Chairman.*) All I can say is that it is the duty of somebody to see into that. It ought to be a reason for taking away a man's certificate, to deliberately appoint a man as a fireman who did not know how to write.

31186. (*Mr. Enoch Edwards.*) Following this particular question that you are asked, you suggest that you have firemen who may be qualified otherwise, but who cannot write?—Well, they are practical men.

31187. Of course ordinarily they would understand their duties?—Yes.

31188. Is this class of men you are referring to old men?—Yes, as a rule they are.

31189. Before the pre-historic School Board days?—Yes.

31190. One can hardly conceive a man who cannot write now, particularly in Wales, where your education is so advanced?—No.

31191. It would be rather a small number who cannot write, after all?—Well, I should think so.

31192. In your smaller pits you do come across men?—I have come across three or four cases in that way, and in my opinion they ought to be able to read and write.

31193. (*Chairman.*) Are they old mining men?—Yes, elderly men.

31194. (*Mr. Enoch Edwards.*) That would not happen at your larger collieries?—No, I do not think so.

31195. At the smaller places these men have acted for years?—In the case I cited now there are about 80 or 90 workmen employed at the colliery.

31196. I gather from you that a number of these mines you are referring to have no proper means of ventilation?—Yes.

31197. Have you ever called the attention of the mines inspector to it? Have you, or any of your people, called attention to it?—I have been speaking personally to the inspector about it, and he was telling me that he would give his attention to them.

31198. Of course now the inspector would have some power to enforce ventilation?—Yes.

31199. And if your district complained that certain collieries were not ventilated, he would attend to them?—Yes, but in my opinion they ought to be compelled to ventilate the mines with a mechanical contrivance, and not depend on the wind.

31200. Natural ventilation, you mean?—Yes.

31201. Where you have natural ventilation is there much blasting in the mines?—Yes.

31202. I suppose sometimes they get the fumes away from the men's working places?—It is stagnant there all day.

31203. With regard to your observation about these bore-holes, I do not know whether I am rightly interpreting you. We have bore-holes now?—Yes.

31204. Bore-holes taken on a head and flank sides when you are approaching water?—Yes.

31205. I gather what you mean now is a person working up to his own boundary?—Yes.

31206. And the coal belongs to another person in another mine. That shall not be abandoned before he puts in the bore-holes?—Yes.

31207-8. That is different from the bore-holes we have now?—Yes.

31209. You suggest that where they are going to abandon the work in the lower side they should be compelled to leave bore-holes of such a depth?—And plug them, and when approaching from the lower side they will be safe by boring. Perhaps they will strike the hole first of all, before striking the water, and by having the plug inside the water would not rush. That is my idea.

31210. I think the idea is so far as protecting the person who gets the mine lowered and comes up to it in the case of a pound of water. It would drain off gradually without carrying with it a whole body of coal, as it has done in some disasters?—Yes.

(*Sir Lindsay Wood.*) Is that exactly what he means? He says coal is on the inside, and then the water would come in the inside. He said the bore-holes were put in and plugged up.

31211. (*Mr. Enoch Edwards.*) I am not following the suggestion about plugging, but the bore-holes are bored and left there?—Yes, and plugged.

31212. I do not know what the plugging may involve in it. If plugged they may go on with a piece of working past it, and find it very thin, and the bore-holes would not help very much. My idea is that when a colliery is approaching its boundary, these bore-holes being there, they tap the water out of the bore-holes long before they take the barrier out?—Yes.

31213. In answer to Mr. Ellis about checkweighers you suggest that in inspections by workmen they should have power to appoint checkweighers as examiners?—If we should succeed in getting additional inspectors, it would be, in my opinion, better to do away with the workmen's examinations.

31214. That is, he should not be debarred by law from being appointed?—No. I was thinking that he was an independent person, and that he could give a correct report of the state of things underground.

31215. Have you had much experience of these workmen's examinations?—Yes. I have been examining collieries myself.

31216. Of course you have made your report out?—Yes, a correct report.

31217. Have you ever felt diffident about this report?—Yes.

31218. That is to say, if there was something wrong in the mine and you reported it, the manager might not like it?—I was condemned for giving a report of that nature. That happened 25 or 29 years ago.

31219. I am pleased to think that many of these things happened a good while ago, because I could tell you an experience of that sort myself. The men have it in their minds, if they report truthfully what they have seen, it is likely the under officials will not like it to be on record in the office?—Yes.

31220. You do not have much difficulty from the general manager in those cases?—No, not in many, but the men do not take advantage of that provision in the Act. They are afraid if they go round and report what they have seen that they will be persecuted, and therefore it is a dead letter as far as our collieries are concerned.

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31221. Could you in a word tell us exactly what you mean by these inaccurate plans. Is it the plan of the adjoining property, or the plan of the colliery that is working. What have you in your mind?—All the collieries. If one colliery works beyond its distance and does not insert it in the plan, that would not be a correct plan.

31222. If a colliery works beyond an agreed distance, where there is a question of royalty involved, that would be the reason for not putting it on the plan?—I do not know.

31223. Having stolen his neighbour's goods?—Yes.

31224. You think in that case he would not put it on?—Yes.

(*Chairman.*) I will just call attention to the report on the Caradog Vale case, by Sir David Brynmor Jones. He says, in the course of the Report in regard to the matter on page 10: "I do not, upon the whole, feel that it would be just to cast any blame upon the present owners, Quinton, or Kingdon, in respect of the inaccuracy of the working plan," and he finishes up with this: "The trial at the Assizes attracted considerable and widespread attention and interest throughout the coalfield of South Wales, and will, I believe, have a very salutary effect on those responsible for the safety of the persons employed in and about the mines situate in that important district." In Sir David Brynmor Jones' opinion, at all events, some good was done by this investigation, and he does not advise any further legal proceedings against these men, although, having been acquitted of manslaughter did not prevent them from being prosecuted for an offence against the Coal Mines Regulation Act, 1887. He says they might have been prosecuted, but he does not advise it. It does not seem to be a very strong case to support your contention that there ought to have been a further investigation.

31225. (*Mr. Wm. Abraham.*) It was strong enough to lose a lot of lives?—Yes.

(*Chairman.*) A lot of lives were lost, no doubt.

31226. (*Mr. Wm. Abraham.*) You believe there ought to be a "thorough examination of shackles, couplings, etc., and to have them annealed at least every six weeks." Will you explain that?—That is my opinion.

31227. Will you kindly explain it?—There is some sort of examination; they say that they examined the shackles, but I have attended four or five enquiries where men have been killed owing to the snapping of the shackles. In order to detect any defect that there may be in a shackle or a coupling, in my opinion, it ought to be thrown into a furnace once every six weeks. It would improve the quality of the shackle and show the defects.

31228. The shackle is the chain that hooks two trams together?—Yes, the coupling.

31229. (*Mr. Smillie.*) See to the couplings, you mean?—Yes.

31230. (*Mr. Wm. Abraham.*) You think so, and it is the opinion of some engineers, is it not?—Yes.

31231. That there is a way of finding out a defect in these shackles if they were annealed?—Yes.

31232. Other couplings you would have placed on the side of the tram?—Yes.

31233. So that if the shackle broke these couplings would keep the journey together?—Yes. Perhaps it would be better to explain that we have got a large number of collieries which are steep, the gradient about 22 inches in the yard, and the strain when going up is great.

31234. You know cases, doubtless, where in your opinion and in the opinion of a fellow workman the extra couplings in use have been of assistance to the shackles, and although the shackle broke the trams could not run away?—Yes, and in the Inspector's Report for last year he recommends them.

31235. (*Sir Lindsay Wood.*) Do you confine these remarks to where the seams are steep, or practically on a level?—Where they are steep.

(*Mr. Wm. Abraham.*) It is with these collieries he is dealing.

(*Sir Lindsay Wood.*) He made a rather general remark.

(*Witness.*) The danger on the flat would not be so much, but when the gradient is great and when the couplings break, there is a danger of persons being killed.

31236. (*Mr. Wm. Abraham.*) There would not be any danger in a shackle breaking on the flat?—No.

31237. The real danger is on the slope?—Yes.

31238. Take Trimsaran; if these couplings had been in use with the shackle the probability is that accident would not have happened?—I agree.

31239. That is a case within the knowledge of us all here?—Yes.

31240. Could you add other cases in your own district?—Yes. There was a case at Pencoed Colliery, and I remember a discussion with the manager and the inspector at the time. The inspector was condemning the shackle and suggesting that there ought to be better protection in these places where the gradient is great—short couplings in addition would materially reduce accidents.

31241. So that the inspector of the district agreed with your view and our view in this matter?—Yes. I suggested another thing; when the men are going backward and forward down these planes there ought to be a chain underneath in addition to the coupling. There is a danger for the rope to go under the wheels, and add to the danger, unless you can have something to attach the rope or the chain underneath to the coupling and keep it under the trams or under the car.

31242. Keeping it from trailing on the ground?—Yes.

31243-5. Those suggestions of yours you are conscientiously of opinion would reduce the accidents from cars running away?—Yes, materially. By the report of the inspector for last year there were 90 cases where persons had been injured in haulage by trams, and so forth.

31246. The district now under Mr. Dyer Lewis?—Yes. And it is a serious question.

31247-8. You are of the same opinion as Mr. Watts Morgan with regard to giving the same facility to workmen to express themselves as to the owner when Special Rules are made. Then you suggest as an improvement in the system of timbering that cogs should be used?—Yes. I know collieries where there is a good roof, rock top, and they are working on the longwall system, where there is not sufficient rubbish to pack up the gob. They are only standing posts, and when the top begins to work it is very dangerous, but if they had stood cogs in addition to packing, it would support the top and make it less dangerous for the men.

31249. If there is anything we have missed, now is your time to say it. We are reluctant to keep you all day, but do not leave anything important?—There is one important thing I want to mention with regard to manholes. In steep measures I would suggest that the manholes should be made oftener than is provided in the rules. When they are working on the slant, and if a journey of trams follow and you are climbing up a place dipping 18 or 20 inches, it is a matter of impossibility to reach the manhole unless there is plenty of room alongside the road.

31250. Your complaint is this: where coal is brought up by surface haulage, the roads in some cases are narrow?—Yes, that is one complaint.

31251. There is no room for the men to shelter, and the manholes are not frequent enough?—Yes.

31252. There, again, could you give some instances?—A man was killed about 12 months ago.

31253. We only want one instance?—He was running in front of the journey, and the journey killed him because there was not sufficient room between the side and the trams; he was crushed. If he had only gone a yard further he would have been on the surface.

31254. There was not room for a man between the tram and the side?—No.

31255. (*Sir Lindsay Wood.*) How far were the manholes apart at that place?—I do not remember how often they were at that colliery.

31256. (*Mr. Smillie.*) Was it an engine plane?—Yes.

31257. (*Sir Lindsay Wood.*) You are aware if there is not room alongside the side of the line to travel, the manholes must be 10 yards apart, and not 20 yards?—Every 20 yards I believe, on an engine plane.

31258. (*Chairman.*) It is 10 yards in the Act of Parliament?—And 50 yards on levels.

31259. (*Mr. Wm. Abraham.*) What is it?—10 yards apart, and in steep measures the distance should be less.

(*Mr. Smillie.*) We were dealing with this yesterday.

(*Chairman.*) Rule 14 says "or if there is not room for a person to stand between the side of a tub and the side

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Mr. W. E. Morgan. 21 Nov. 1902.

of the plane then (unless the tubs are moved by an endless chain or rope) at intervals of not more than 10 yards." Why should that be so?

(*Mr. Smillie.*) If moved by an endless chain or rope, 20 yards is sufficient.

(*Chairman.*) I suppose it is because it goes more slowly.

(*Sir Lindsay Wood.*) Yes, about a mile and a half per hour.

31260. (*Mr. Smillie.*) It was a tail rope you were referring to?—Yes.

31261. (*Mr. Wm. Abraham.*) In this case you are citing now how far would the man be on the road?—He started out when the journey was coming, and he thought he could manage to go out to the surface before the journey, and was caught between the journey and the wall.

31262. How far behind him was the next manhole. Could he have turned in there?—Yes, I daresay he could.

31263. How far behind him?—About 20 or 25 yards.

31264. That is the point. That is the cause of your complaint, that there was no manhole for him to turn in within 20 yards of the mouth of the drift, or 25 yards as you say?—My point in regard to that case is this. The man had gone beyond the manhole, thinking he could succeed in getting out. If there had been sufficient width between the road and the side he would not have been killed.

31265. That is another thing. You are now advocating sufficient room for the man to go to the side?—Yes.

31266. The original point is, you want the manholes to be oftener when there is no room?—Yes.

31267. My point is this. We want to know, if you can tell us, how many yards had that man passed the nearest manhole to the surface?—I do not remember; I am not in a position to say, although I attended the enquiry.

31268. Were there 10?—Yes.

31269. Were there 15?—Yes, more than 15.

31270. Were there 20?

(*Sir Lindsay Wood.*) He says he does not remember.

(*Chairman.*) In that case the law was not complied with.

(*Mr. Wm. Abraham.*) That may be so.

(*Chairman.*) If that is so, the suggestion is that the law has not been carried out, not that it requires alteration. I understand you to say you think that there ought to be more numerous manholes than there are now. This particular case does not bear out the contention, because there ought to be manholes every 10 yards according to Rule 14, and if not the law has not been complied with. He could not possibly be more than five yards from a manhole if the rules had been carried into effect.

(*Witness.*) What I want to point out is this, whether it is not possible to have improvement in these steep measures. A man cannot move quickly when the gradient is great.

31271. (*Chairman.*) That is another matter. Mr. Abraham pointed out that you are talking about two different things. First of all, you suggest that there should be a gangway at the side sufficiently wide for a man to pass?—Yes.

31272. Another thing is about the manholes. With regard to the manholes in this particular case of an engine plane and there not being room for a man to pass between the trucks and the side, that was a case where under the present law the manholes should be every 10 yards. You do not suggest that that is too long?—As far as that goes, in my opinion that could remain; but in steep measures I think the manholes ought to be oftener—a great deal, too.

31273. (*Sir Lindsay Wood.*) You would rather have sufficient room alongside the wagon-way and the wall for the men to travel?—Yes, and manholes.

31274. Ordinary manholes, 10 yards apart?—Yes.

31275. (*Mr. Smillie.*) You say that the dip in some cases is 18 inches to 2 feet 10 inches. That is practically the edge of the workings?—Yes.

31276. Is it safe in any case for a workman to travel on a road of that kind while the trams are being run?—No, it is not safe. One cannot say that it is safe. There are men constantly working as road-men, timber-men and repairers on these steep slants.

31277. Do the men travel these roads?—They must travel backwards and forwards in order to carry on the work.

31278. I do not mean those who are engaged on the road, but do other men travel those roads?—Yes.

31279. Are they allowed to travel those roads during the time the trams may be drawn up?—Yes, they come out as soon as they have finished.

31280. Supposing a rope breaks in a case of that kind, could any manhole save a person where the inclination is very great. Would not the tubs go down almost as if dropping them down a shaft?—Yes.

31281. A person has not time to go into a manhole in a case of that kind?—No, not much.

31282. It is absolutely unsafe for persons to travel a road of that kind during the time the trams are being drawn up. Is not that so?—Yes.

31283. Consequently it would be necessary to have a travelling road?—A travelling road would be better, certainly.

31284. If it is at the risk of men's lives every time they go up and down a road of this kind, would it not be well to make a rule that persons should not travel a road of that kind?—I did not understand that.

31285. If it is unsafe, and you say it is, would it not be well to lay down a bye-law that workmen are not to be allowed to travel a road of that kind, where the inclination is great?—For the sake of safety it would be good.

31286. This Commission is dealing with safety, and you are here to give evidence as to what would be safe?—Yes.

(*Sir Lindsay Wood.*) You are asked whether it would not be better to prohibit the men coming up and down these inclines altogether. Would you add the words "while the setts are running"?

31287. (*Mr. Smillie.*) I was going to put that. If there is a place where there is no travelling road distinct from the haulage road, it could be laid down that persons were not to be allowed to travel to and from work during the time that the trams were running?—Yes, they could do that; and we have collieries where, after finishing winding coal, they send cars down and the men come up on the cars.

31288. They are brought up on the cars?—Yes.

31289. I think you put it here that in every case there should be room alongside a haulage road for men to stand out of danger during the time they are travelling in the event of the trams running away?—Yes; there is better chance of escaping if they fail to reach a manhole.

31290. And the workmen should not be required to travel those roads during the time the trams are running up and down unless there is sufficient room?—Yes.

31291. In addition to that you would have manholes every 10 yards at the furthest?—Every five yards.

31292. In a very steep gradient?—Yes.

31293. You would be in favour of having all manholes in mines white-washed perhaps four times a year?—Yes, for them to be visible to the men.

33294. At the present time that is not compulsory, I think?—I am not sure. I have seen them whitewashed.

31295. Is it done?—In our way?

31296. Is it done universally?—In the majority of cases.

31297. Is it a good precaution?—Yes.

31298. I could not really grasp the difference between shackles and couplings. Will you let us know what is meant by shackles in the case of a train of trams?—I believe "shackles" and "hitchings" are the same. They connect the trams. We have short chains with hooks in some places coupling the trams.

31299. They are connected with the draw-bars of the tubs?—Yes. There is something by the side of the tram.

31300. You propose short couplings in addition to the central couplings?—Yes, in addition. There are collieries now who have chains at the side of the trams.

31301. Which go the full length?—Yes.

(*Sir Lindsay Wood.*) Side chains between each tub?

31302. (*Mr. Smillie.*) Those side chains are, as it were, additional couplings?—The journeys are not always safe when going down. I have noticed that on many trams the chains are slack and are apt to unhook, and the trams run away. If there were a chain or something in the middle and at the sides it would be better protected.

31303. What you want to provide for here is not for the breaking of the rope but for the breaking of the couplings?—Yes.

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31304. It has been proposed that there might be either a bottom chain going the whole length of the train or a top chain over the top. Would it be suitable to have a top chain, in your opinion, or are the tubs filled so high with coal that it would not be possible to have one ?—I do not think I would object to the top chain where the tub is not built up with coal, or to a bottom chain. I prefer the chains at the side.

31305. Do you mean a continuous chain or short chain from one tub to another ?—A short chain from one tub to another.

31306. That is an additional coupling really ?—Yes. In the district from where I come they are not filling large coal. It is not the same as in the Rhondda Valley, where they work large coal and the coal is built outside the tram.

31307. What is your objection to a top chain going the whole length of the train ?—I think if they fill above the tram it would tend to throw the coal down and it would make it more dangerous. I do not think it would be as safe when men were travelling on top as underneath or on the side.

31308. Is it usual at any of your collieries, or is it general, for pony drivers to drive coals out from the face to the pit bottom ?—Yes, with the exception of steep places.

31309. Is that the class of rider you mean ?—No.

31310. Is this loading on the train of trams ?—Yes, on the trams. There is no horse at all attached to it.

31311. Roads should be of sufficient height and width to give room for him to ride without danger ?—Yes.

31312. There are cases when quite suddenly the roof may be too low ?—Yes, we have instances of riders who have been killed. There was no height at all.

31313. They have been crushed between the trams ?—Yes, between the trams and the roof.

31314. The same thing in some cases may apply to pony drivers who sit on the trams ?—Yes.

31315. There is a tendency to prevent sitting on the trams altogether, either in trains of trams or in a pony driver's train. There is a feeling that they should not be allowed to sit on them. Have you heard that put forward by the managers or owners ?—Yes, they object to riding.

31316. Take the case of a pony driver; where is the safest place ? Is it safe for him to go between his horse and the trams, or to walk behind his horse and the trams ? Is that a safe position to be in ?—No.

31317. If he is behind his trams altogether, can he effectively drive his horse from that distance if behind six or seven trams ?—No, unless there is sufficient room at the side to pass.

31318. You know as a matter of fact that is not so ?—I have seen places myself where if a tram goes off the rails the haulier could not pass: he could not go on the top of the trams, and could not pass by the side. He must wait for somebody else to come and raise the tram.

31319. If behind the train of trams, and the first tram goes off the rails, he is powerless. He cannot pass by the side or the top ?—No, he must wait till somebody comes in search of him,

31320. As a matter of fact the safest place is to sit on the first tram, if the roof is high enough ?—Yes, provided there is sufficient height. You do not find that in collieries, worse luck.

31321. You consider the law should lay down that there should be sufficient height where it is necessary for a person to ride on a tram ?—That is my opinion.

31322. To remedy any danger ?—Or abolish the riding altogether.

31323. With regard to unskilled labour in mines, have you any unskilled labour in your mines ?—Yes.

31324. Will you give us roughly the proportion. Is it five per cent. of the men at present employed who are unskilled workmen or ten per cent. ?—We are in close proximity to the agricultural district where the majority come from.

31325. Your area has been a rapidly developing coalfield for some years ?—Yes, and it will in future. It has been so in the past.

31326. You have had a large influx of unskilled labour into the mines ?—Yes.

31327. I think you have already said you consider it a source of danger to themselves and other workmen ?—Yes.

31328. Is there any care taken to ascertain whether they have been previously employed in the mine before they are engaged ?—No; these men are taken on because they are cheap labour. I know of instances where these men are taken on thinking of course they will work cheaper than skilled workmen.

31329. Is it a general rule in your district that no person is to be employed or go underground without the consent of the general manager or the under-manager. Must he know before any person who is employed goes underground ?—I believe so, or the man who employs him; but the rule differs at some collieries. The over-men have power to engage them, and at other collieries the firemen have power, and in those cases the manager would not know.

31330. Have contractors power to engage men and take them down ?—Yes.

31331. Do you mean to say without the manager having any knowledge of it, contractors may employ them ? Is there any such thing as a contractor employing 10 or 15 or 20 men ?—There was a case not long ago in our district where there were about eight working under a contractor, and he employed them directly.

31332. Do you know whether or not he had the consent of the manager to employ men ?—I do not know that.

31333. He might employ unskilled persons and take them down ?—Yes.

31334. The employment of unskilled persons, unless it is at the face to work alone, is not a breach of the Coal Mines Regulation Act. You are aware of that, of course ?—Yes.

31335. Those men may be employed at very dangerous work, although not working at the coal face ?—Yes.

31336. They may be employed removing rubbish and stowing it in vacant places ?—Yes. If they are not experienced men they are sent to these abandoned places, and if they do not have the experience of practical men, sometimes they interfere with a post and bring down a fall, while a man who knew the conditions would not.

31337. In the Welsh fiery mines the abandoned places where they stow rubbish may be sometimes the most dangerous parts of the whole mine ?—Yes.

31338. In addition to firedamp which may be there, the nature of the roof may be very dangerous ?—Yes.

31339. You think it unsafe to employ an unskilled person with no previous experience of mining to do work of that kind ?—I do, unless he is not working by himself.

31340. Under the supervision of a skilled person, you mean ?—Yes.

31341. Who would be responsible for his safety, of course ?—Yes.

31342. I daresay you are not able off-hand to give any figures, but you believe that more than the average number of accidents have taken place to unskilled workmen ?—Yes, although I cannot prove that by figures.

31343. (*Sir Lindsay Wood.*) "Improvement in the mode of signalling, in particular in narrow and steep places." What do you refer to there ?—My experience about two or three months ago was this: I went into the colliery and the slant was dipping about 20 in. The trams were rubbing both sides, and there was no height at all. We were riding in the trams, and the trams went off the rail. The man in charge had to draw the wire before he could stop. I was in one of the trams, and I was thinking at the time that there ought to be a better system of signalling than that, because if the trams had gone on and knocked double timbers out probably all of us would have been killed. If there were electrical signalling at the colliery it would be easy to touch the wire and the engine would stop at once.

31344. Was this an engine plane ?—Yes, and there was no room for any of us to jump out of the tram.

31345. Was this an engine plane ?—Yes.

31346. Worked by a steam engine ?—Yes.

31347. Are the men allowed to ride in the tubs on these steep gradients ?—From what I gather, the men were descending and ascending in the trams, and no cars provided, and naturally, if the weight was at the end of the tram, it was raising the front part of it.

31348. Are men permitted by the colliery manager to ride in the tubs ?—Yes. He allowed me and others to ride.

(*Mr. Wm. Abraham.*) That is the way they go in and out. You had better answer it direct, "Yes."

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Mr. W. E. Morgan
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31349. (*Sir Lindsay Wood.*) I only want yes or no. You think that there should be better signalling along the engine plane?—There should be better roads and better signalling. There was no chance to get out of the tram there. It was rubbing both sides, and I swore I would not go down a colliery again.

31350. Is that the usual state of the engine planes in South Wales?—No; there are some collieries in good condition. I have been in many, and could not suggest any improvement.

31351. These are exceptional?—Exceptional.

31352. Then you refer to the plans. Is that done through inefficient men, or is it done wilfully?—Wilfully. They knew very well that they were working other mines' boundaries.

31353. What is the object of their doing it wilfully?—They would not be called on to pay royalties. An economical point of view, I think.

31354. Would it be economical to work somebody else's coal?—Yes.

31355. How is it economical?—They would not pay royalties, and the colliery would last longer. In the case I mentioned they had been working nine years, and the life of the colliery would be nine years more.

31356. In that case did they pay any royalty for the coal they had worked wrongfully?—No.

31357. How do you know?—Because I read it in the paper. The case was on.

(*Mr. Wm. Abraham.*) The case was tried by a law court.

31358. (*Sir Lindsay Wood.*) That was a purely criminal act. It is an allegation of criminality. Is that common in South Wales?—It actually occurred.

31359. Is it common?—No, it is not common; but after all, if men would go and work that piece of coal it may be the means of perhaps 100 men losing their lives.

31360. The wrong was in the theft of the coal?—That is the reason why I was suggesting that power should be given to the inspector to pay an occasional visit, and order a person to make a survey.

31361. You suggest that the inspector should be compelled to make plans wherever he considers that there is theft going on?—No, I do not look upon the question from that standpoint. I look upon the question from the point of view of safety to the men.

31362. Where is the danger?—It does not matter to me whether he paid royalties or not.

31363. Where does the danger come in? Why was it unsafe?—If it is not marked on the plan that the coal has been worked, it would appear to everybody who would work in that direction that the place is solid.

31364. It might be?—And if they were working to the dip that place may be full of water.

FORTY-FIFTH DAY.

Wednesday, 4th December, 1907.

PRESENT:

Lord MONKSWELL (*Chairman*).

H. H. S. CUNYNGHAME, Esq., C.B.
F. L. DAVIS, Esq.
ENOCH EDWARDS, Esq., M.P.
THOMAS RATCLIFFE ELLIS, Esq.
ROBERT SMILLIE, Esq.
S. W. HARRIS, Esq. (*Secretary*).

Mr. JOHN GUEST, called and examined.

Mr. J. Guest.
4 Dec. 1907.

31365. (*Chairman.*) I understand you attend here on behalf of the Yorkshire Miners' Association?—Yes.

31366. I suppose you have been deputed by the Yorkshire Miners' Association to give evidence, and you have talked over the matter with them?—I have not.

31367. Then can you tell us for certain that the evidence which you will give is evidence that will commend itself to the Association? How far do you speak on behalf of the Association, if you have not talked the matter over with them?—I am representing the Association here.

31368. No doubt your Association is always discussing these questions?—That is so.

31369. You have been deputed by them to give evidence, but you have not had any special instructions from them?—That is so.

31370. They held no meeting before you came here to give evidence?—We have had no special meeting. Of course these matters crop up in our business meetings from time to time.

31371. (*Mr. Enoch Edwards.*) Do you mean at your Executive meetings?—At our Council and Executive meetings these matters are matters of discussion.

31372. (*Chairman.*) But you have had no special Executive meeting to discuss the question of the evidence which you are going to give here?—No.

31373. You say that as regards Government inspection you think the number of inspectors is inadequate, and that they are totally unable to efficiently inspect the mines under their charge, and that a very large proportion of their time is taken up in visiting places where accidents have occurred?—That is so.

31374. You say that on such occasions only the scene of the accident is visited, and on no occasion will the time at the disposal of the inspector allow of a thorough examination of the mine?—Yes.

31375. What is your view as to a mine inspection; how much inspection do you consider is desirable?—I should consider an inspection of a mine was an adequate inspection when the mine was inspected as a whole.

31376. You mean when every working place of the mine was inspected, and all haulage roads and every part of the mine?—I consider that is desirable.

31377. How often do you think it desirable that that should be done in the course of the year in each mine; would you say twice a year was sufficient, or once a year, or would it depend upon circumstances?—I take it that would depend to a certain extent upon the circumstances of the mine. At all events, I should say not less than twice a year.

31378. You think that every mine ought to be thoroughly inspected at least twice a year?—Yes.

31379. I suppose if every mine ought to be inspected at least twice a year, there are some mines where there are difficulties in working, or where there have been accidents, which ought to be inspected oftener than twice a year?—Yes.

31380. How many inspectors do you think you would require, say, in your district to inspect every mine in the district at least twice a year, and some mines oftener?—I take it that we should want at least 10 further inspectors.

31381. Ten for your district?—Yes.

31382. At present you have three?—That is so.

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31383. So that you would want at least three times as many more. How would you distribute the inspectorate; would you have your district cut up into several districts, or would you have a head inspector over the whole district, and more assistants?—I should be in favour of the ground being split up into districts, under the supervision of the head inspector.

31384. You would have the inspectorate district as large as it is at present, and you would have it divided up into perhaps nine or ten sub-districts, and at the head of each sub-district there would be a sub-inspector?—That is so.

31385. Then what about the second-class inspectors whose appointment you recommend. Would they have a district, or would they be under the inspector of the district?—My idea with reference to the sub-inspectors was that these, as I should term them, working-men inspectors should act under the direction of the chief inspector, and have a separate district allocated to them.

31386.—Then would you have three separate grades of inspectors, or only two grades? Would you do away with the present grade of assistant inspector and keep the chief inspector of the district as he is now, and give him working-men assistants only?—I should see no objection to it being split into three districts under the supervision of the present three inspectors.

31387. That is a different story from your first story. Then which do you prefer—that your district should continue one district and that you should have a head inspector over the whole district, or would you prefer it to be split up into three districts, and that the head inspector should only have a third of the district to look after, and the assistant inspectors should have the other two-thirds? In that case you would make the assistant inspector, as I understand, of equal authority with the inspector, because each would be supreme in his own district?—I see no difficulty in the inspector being head of the district, and that there should be three sub-districts under the charge of the assistant inspectors, and then the working-men inspectors under those.

31388. Do I understand you to mean that the district should remain as it is, one district, that at the head of the whole district there should be an inspector, and that there should be two or three assistant inspectors who would work under the head inspector, but who should only go into a part of the district—that the district should be mapped out into two or three sub-districts, and that each assistant inspector should have a sub-district assigned to him, but that he should be under the chief inspector of the whole district?—Yes.

33389. Then we have got four. First of all we have the chief inspector, and now we have three assistant inspectors—that is four. Then you would have, in addition to that, at least six working-men inspectors in your district, I suppose?—Yes.

31390. What would you pay them?—We have not gone into the question of the payment of these inspectors, They would be in the employ of the Government, I take it, and the Government would pay them.

33391. What would you suggest the Government should pay them—£3 or £4 a week? Is that the sort of wage that you would consider a desirable wage for men of that class, doing that work?—I should think that they ought to have a wage adequate to the work that they have to do, but the question of wage is not a point which we have gone into, or which I have thought about. I take it that at all events they would require a wage equivalent to, say, that of an under-manager in a colliery.

31392. In fact the wages would be such as to attract the very best workmen to undertake the duties?—That is so.

31393. And I suppose they would be appointed like the other inspectors, for life; they would not have to go back again to the pit, and they would not be inspectors appointed for a term of years?—I should say they would be appointed for such time as they gave satisfaction.

31394. The same as the other inspectors. You say that there ought to be a qualifying examination. What is your idea of the qualifying examination which there should be for a third class inspector?—I should say such an examination as at all events would equip him for the position of an under-manager.

31395. A second-class certificate?—A second-class certificate.

31396. Then you would not have a special examination, but you would make him pass an examination for a second-class certificate the same as the under-managers have to do?—I see no objection to it being a special examination, but I should make it, as far as its character was concerned, of the same class, so that they would have the same rate of ability.

31397. I am now going to ask you about the inspection by the men under Rule 38. You would wish to alter the rule which limits the inspection by men. You propose to extend that rule so as to include not only persons who had practical experience underground, but also men who have only acted as checkweighmen. You say in your statement, "We desire that the rule which at present prohibits any but men working at the face from making an inspection should be amended so that other men working in the mine, or men who have practical experience, such as checkweighmen, should be appointed"?—Yes.

31398. So that you consider that practical experience of a man as checkweighman, without having been underground at all, would be sufficient?—No.

31399. Then I should like to know your views?—My idea with reference to that is that men who have had practical experience, and who may be checkweighmen, should be eligible for the appointment, not that checkweighmen should be appointed who have had no experience. But I may say that in that connection we have very few checkweighmen in Yorkshire who have not been practical miners.

31400. You would not consider that a checkweighman was eligible for such an appointment unless he had in point of fact either worked at the face or had gained experience underground in some other manner?—No.

31401. Then you do not consider it necessary that a man should actually work at the face. Supposing he has been engaged in other operations underground, in looking after the haulage, and that sort of thing, do you consider that he would be eligible?—I consider that he should have had practical experience as a working miner.

31402. You mean working at the face?—Working at the face.

31403. The general objection that has been taken hitherto by the men to Rule 38, is that it limits the employment of persons to men who are at present practical miners working at the face, and does not allow the appointment of persons who may have left the mine for some years, but who have had very large experience of working at the face previous to their having left for some other occupation, we will say?—Yes.

31404. Do you think that the rule might very well be amended in that way, so that not only men should be eligible for this inspection who are at present working at the face, but also men who have at any time gained sufficient experience at the face to make them experts in mining matters?—I think that the rule should be amended so as to say "who are or who have been practical working miners."

31405. That has been suggested before. You would be satisfied with that emendation?—Yes.

31406. With regard to the question of cost, I understand you say that some provision should be made for payment. What sort of provision do you suggest should be made; who should pay?—I consider it desirable that some provision should be made for this money being collected. At the present time the rule says that it should be done at the cost of the miners, but it makes no provision for that cost being collected in any way.

31407. How do you mean "collected"; do you suggest that there should be a sort of levy on all the workmen in the mine, and that it should be collected in that way, or what do you mean by "collected"?—I suggest that it should be obtained in the same manner as the checkweigh money.

(*Mr. Ratcliffe Ellis.*) That is by a levy; the checkweighman is appointed by ballot, and then he can levy upon the whole of the men employed, for his wage.

31408. (*Chairman.*) If there is no levy, how are they paid now?—At the present time they are paid from the funds which may be in hand at the colliery for local purposes. They are paid from local funds at the colliery, but there is no compulsion on any man to contribute, I take it.

31409. So that you think they should be put in the same position as regards payment as the checkweighmen?—Yes.

31410. You do not suggest that this sort of inspection should be paid for either by the Government or by the owners; what you suggest is that there should be a levy made upon the men for payment?—Provided the

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Government go in for working-men inspectors, to make what we should term an adequate inspection of the mine I should not suggest that this charge be a further charge upon the Government. But under the present system if the men's inspection is to some extent to take the place of the Government inspection, of course the Government ought to pay for it.

31411. Supposing you had your way, and that all these third-class inspectors were appointed, would you think it desirable to have any further inspection at all under Rule 38, or would you be content with the inspection that you would get by the Government inspectors in that case?—I take it that, provided the men were satisfied that the mine was thoroughly inspected, they would not desire to appoint men to further inspect.

31412. I understand that in Yorkshire you inspect more under Rule 38 than in any other part of the kingdom; about a third of your mines are periodically inspected in this way?—Possibly.

31413. We have had that stated in evidence by one of the inspectors, Mr. Walker?—I could not state any given percentage.

31414. Then you would, as I understand it, not lay any very great stress upon the retention of this power by the men to inspect under Rule 38 if you had a number of working-men inspectors, sufficient to thoroughly inspect the mine twice a year or more, appointed by the Government. You would be very fairly content to leave it to the Government inspection in that case?—I do not see any objection on our part to the rule being retained even then. The men would not take advantage of it if they were satisfied with the examination of the Government.

31415. In that case, of course, you would not suggest that the Government should pay these men—you suggest that they should be paid by a levy on the miners?—That is so, provided the additional working-men inspectors were appointed.

31416. Would you suggest that no man should be allowed to inspect a mine who was not working in it or who had not been working in it; that no man should be transferred, say, from one pit to another for inspection purposes? At present, I believe the general rule is that you appoint two men who are working in the very pit itself which they are to inspect?—Yes.

31417. Do you think that is a good plan, or do you not think that the men should be allowed to appoint anybody they please, whether he is working in a given pit or whether he is working anywhere else, to go down any pit in the district?—We have had cases in our own district where men have been appointed from other collieries already.

31418. Do you object to that or not?—I think that plan is desirable.

31419. That the men should not be restricted in their choice?—That is so.

31420. With regard to inspection by officials, you say that the deputies who have the oversight of the various districts, have often too large a district, or have so many other duties imposed upon them that they have not opportunity to make that strict examination which is always desirable. Do you think as a general rule the districts of the deputies are too large, or is it only in certain isolated cases that you complain?—My opinion is that the districts, speaking in a general sense, are too large for the men to thoroughly examine the gates and roadways during the time at their disposal.

31421. They quite understand that that is part of their duties—that they ought not only to examine the working places, but they ought to examine all the gates and roadways if they have got time to do it. Every deputy understands that is part of his duty, I suppose?—I suppose so.

31422. But you think that in many cases it is physically impossible for them to do that?—I think that in many cases it is physically impossible for them to exercise supervision over the districts under their control.

31423. Another complaint which you have is that they have other duties to perform which are not concerned with the safety of the men, that is to say, in looking after the haulage, seeing how the tubs are filled, and that kind of thing?—Yes, and they are responsible for them in their own district.

31424. That you think is a wrong system?—I do.

31425. Supposing all those duties were taken away from them, and they only had to perform duties appertaining to the safety of the men, do you think that then their districts would be too large?—I would not say that, if they were confined strictly to the safety of the men, and the examination of the district. Of course districts would vary in character as to the necessity for examination.

31426. But the great thing that you complain of, I understand, is that they have other duties to perform, and if those other duties were taken away from them, and performed by someone else, probably the number of deputies at present engaged in looking after the safety of the men would be fairly sufficient to enable them to do their duty?—Possibly so, except in the case of a man who is examining for the morning shift, who is running his district prior to the morning shift commencing work; in our district, say, he may be limited to three hours to supervise his district and get in to make his report.

31427. That is not enough?—If he has a large district he cannot properly do it.

31428. Then you say that even if the deputies were only called upon to do the duties which you think they ought to be called upon to perform, still, in many cases, the districts would be too large?—In some cases.

31429. Or at all events that some arrangement ought to be made to enable them to get through those districts?—Yes.

31430. Then you say that you are totally opposed to the enforcement of discipline by fines, which you think is a most pernicious system, and one which does not produce the result aimed at, its being rather a cause of laxity than a remedy for it. Why should fines be a cause of laxity? What do you mean by saying that they are a cause of laxity?—In my opinion, if a man knows that if he is caught in a certain offence he may be fined half a crown or five shillings, there is not the same discipline over him as if he knew that if he was caught in an offence he would be taken to court.

31431. Supposing there were no fines at all, and no prosecutions or anything done, then things would be worse, would they not? You do not mean to say that the fines would make things worse than if there were no fines?—No.

31432. Supposing a man was simply had up and reprimanded, that would not be as good as a fine, would it? A fine does some good, I imagine, in promoting discipline?—Not in my opinion. I take it that if a man was prosecuted——

31433. I am not supposing that, but I am taking another point altogether. You seem to think that the system of fining is a bad system in itself, and that even if there were no prosecutions it would be no use to have fines. I should have thought that a fine, although it might not be as good as a prosecution, was at all events of some use in preserving discipline?—I look upon it in this way: if a man breaks a rule he may be fined at the discretion of the colliery owner, or he may be taken to court. The practice of fining men for breaches of discipline, to my mind, is a weakening of the rule. If a man's case is one that will be met by a reprimand, he should be reprimanded; if it is not one that will be met by a reprimand, he should be prosecuted, and that prosecution will have more effect on the discipline of the colliery than, say, a score of fines.

31434. I was only objecting to your statement that the fining was rather a cause of laxity than a remedy for it. Fining is a better remedy than nothing at all, I suppose; but the best remedy in your opinion is that the men should be always prosecuted. That is what I understand you mean?—I mean what I say there: there is no question about it that in collieries where fining is in vogue, it is no use in enforcing discipline, because there is the general knowledge that if anything is found out it will be met with a fine. If the men knew that there would be a prosecution, it would have a better effect.

31435. Looking over the number of prosecutions in all the districts, I see that your district is very much at the head of the list. As to prosecutions of workmen the Yorkshire district had, during five years, 785 prosecutions and 758 convictions?—Yes.

31436. However, you think they are not numerous enough; you would like to see more prosecutions?—I object to the system of fining; if the cases demand prosecution they should be prosecuted.

31437. You do not think that even for minor offences fines should be inflicted?—I do not.

31438. Not even for offences that have very little to do with the safety of miners?—I think that it ought not to be left to the discretion of an owner when a man is to be fined or when he is to be prosecuted.

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31439. You are pretty certain that your Association agree with you in that opinion?—Yes; I feel convinced on that point.

31440. With regard to setting up Special Rules, you say that the workmen should be consulted when any Special Rules are being prepared, or when alterations are suggested, and that this would create more interest in the rule and would prevent misunderstanding. I understand that when the rule has been promulgated, any workman is perfectly at liberty to state any objection to it that he pleases, either straight to the management or to the mines inspector, or your Association would probably take up the matter, would it not?—I suppose it is the law that notice shall be put up with reference to these Special Rules; but our point is that if our Association and our men were consulted directly, and our opinion taken, the matter would be discussed and interest would be created, and the rules would be better understood when they were brought out.

31441. You mean you are not consulted at a sufficiently early period; these rules are promulgated and then you are told that you may make any objections you like?—That is so.

31442. But what you want is to have a voice in the framing of the rules before they are promulgated?—Yes. We had a large amount of trouble in our county with reference to the Special Rules *re* timbering. I believe we had one or two cases of stoppage arising through misunderstanding, and I do not know that prior to those rules being put out they had ever been discussed in our society.

31443. They were so badly expressed that there was difficulty in understanding their meaning; is that what you mean?—I mean to say that there was a misunderstanding as to the meaning of certain words in the rule.

31444. So that you think the rule might be more clearly expressed, and that if you had had the drafting of the rule it would have been more clearly expressed. Is that what you mean?—I think that if our officials had been discussing this rule with the other side and then had explained its meaning to the men, it would have helped the men to understand the real meaning and object of the rule, and would have facilitated its working.

31445. But if you thought the rules were ambiguous, or you did not know what they meant, or you thought there would be any difference of opinion as to them, you might, I suppose, have always gone to the owners and asked them what they meant; your Association, or someone on behalf of your Association, I suppose, might have gone to the owners. I understand you would go to the Home Office or to the inspector, and from the Home Office or the inspector you would find out what the rule intended to do, and then if you thought that the wording was not sufficiently clear you could always suggest other wording, I suppose?—Yes. We would prefer to be consulted before the rules are drafted and put out.

31446. With regard to accidents, you say a stricter supervision of the gates and roadways by the deputies is desirable, and that they might also be called upon to make periodical special reports as to the state of the gates in their districts. What do they do now; they make a mark, do they not, to show that they have been through a roadway at a particular time?—Yes, say in each working place.

31447. And you consider that it should be their duty to go through all the roadways to look at the condition of them, and every now and then to report not only upon the state of the working faces, which is the only report they are bound to give, but that they should also be called upon to make special reports as to the state of the gates?—Yes.

(*Mr. Ratcliffe Ellis.*) It depends upon the Special Rule. There is a rule in Lancashire that "the manager, undermanager or fireman shall travel all airways once a week, and the result of his examination shall be recorded without delay in a book to be kept at the mine for the purpose, in the same manner as provided for with regard to the inspection required by General Rule 4."

31448. (*Chairman.*) So that under that Special Rule a man would be obliged to make a report once a week, I suppose, as to all the gateways and roadways?—Yes, but what I had in my mind was a special examination of these gates and roadways, apart from his normal duty, and a special report.

31449. (*Mr. Ratcliffe Ellis.*) Under General Rule 4 he has to make an examination and then he has to report, but now we have this additional rule in Lancashire, which I have mentioned, putting upon him the obligation once a week to make a special examination of all airways that he has to travel?—Yes.

31450. (*Chairman.*) Do you think that that Special Rule would be sufficient to meet your objection?—No.

31451. (*Mr. Ratcliffe Ellis.*) You wish to have that extended to all roadways—not merely to airways, I suppose?—Yes. The point that I have in my mind more particularly is in connection with the gates: of course it applies to all, but to the gates particularly—where the drivers or the trammers are travelling.

31452. You mean the roadway immediately adjacent to the working face?—I mean the total roadway should be examined by the men, but particularly the gates. What we term the "gates" are the roads adjoining the face. We think that a special report as to the state of those gates should be made from time to time over and above the present method of inspection.

31453. (*Chairman.*) Then you think that that Special Rule ought to be strengthened by adding an inspection of the gates, as you call them, to an inspection of the airways: you would say "all airways and gates"?—Yes, and roads where the men are travelling, decidedly—or where they may be driving along the level.

31454. Would about once a week be the proper interval of time?—Yes, I think it would be desirable.

31455. Then with regard to haulage, you say that separate travelling roads where practicable should be provided?—I suppose in some old collieries that could not be done very well. I suppose there are such collieries.

31456. At least, it would be very expensive and almost prohibitive?—I take it it would be possible, although, as you say, it might be very expensive.

31457. Then where you do not have the separate travelling roads, I suppose you would say there ought to be a gangway on one side of the road wide enough for a man to pass while the tubs are running?—Yes; I think it is desirable that in the haulage roads generally it should be as wide as is practicable, having regard to the nature of the roof.

31458. Then you say that manholes should be kept well whitewashed. Do you think that they are sufficiently numerous, or do you suggest that they should be put up at less intervals than is now the case?—I should say that, particularly with reference to where it is 50 yards, the interval is too large.

31459. In those cases where there are 50 yards allowed by the Act of Parliament would you suggest that it should be 30 yards or what?—I should say that 20 yards is far enough for a manhole at any time.

31460. But 50 yards is only as I understand where there is animal haulage?—Yes, but you may have some quick haulage with a horse.

31461. Then you say that in all cases there should be a not greater interval than 20 yards between the manholes?—I do.

31462. What do you say about the number of accidents in horse haulage? Do you know of many accidents that occur in horse haulage?—I have no figures of any with reference to that matter.

31463. Do you know of your own experience of several accidents that have happened in horse haulage which might have been avoided by a manhole being only 10 yards off as you say?—I have known the drivers get hurt, but I have no record with me. We had a case not long ago—of course it was not on a horse haulage road—where a man was killed in a jenny road.

31464. And you think he might have been saved if there had been a manhole close by?—Yes, if there had been a more adequate provision of manholes, or if there had been a separate travelling road.

31465. The haulage road, you say, should be as wide as is compatible with safety? You mean that it should be as wide as possible, I suppose?

(*Mr. Ratcliffe Ellis.*) No, I think not: there is a danger in having it too wide.

31466. (*Chairman.*) Is there a danger in having the haulage roads too wide?—I take it that the nature of the roof would have to be considered.

31467. That is to say, taking into consideration the nature of the roof, you must make them as reasonably wide as you can without causing a greater tendency on the part of the roof to fall?—Yes.

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Mr. J. Guest.

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31468. And you say that they should be kept free from incumbrance. The rule at present is only that every manhole and every place of refuge shall be constantly kept clear: there is nothing about roads. Rule 16 seems to be of very narrow application. It provides "Every manhole and every place of refuge shall be constantly kept clear, and no person shall place anything in any such manhole or place of refuge." That would seem merely to indicate that the entrance to the manhole must be kept clear, and it does not seem necessary under the rule that the place between the two manholes should be kept clear, so that the men shall always have a clear roadway to run along to get into the manhole. That is, I suppose, what you understand by the rule?—That is so.

31469. It seems that in the case of Yorkshire there are no Special Rules to keep the roadway clear, but that in some districts there are?—Yes.

31470. However, you say that there should be some rule either in an Act of Parliament or Special Rule, to say that the haulage roads should be kept quite clear from incumbrance?—Yes.

31471–3. So that any man walking along the side should be able to run along until he gets to a manhole so that he can then go in without obstruction?—Yes.

31474. Would you be satisfied with such a General Rule as is in force in the Scottish district, Rule 47: "The roadsmen, in their different divisions and shifts, if more than one, shall, at least daily, make careful inspection of the whole roadways from the pit-bottom throughout the mine where men are to work or pass, and shall keep the same free from all obstructions, and of the height and width necessary for proper passage and for ventilation." Do you think that meets the case?—Is that with reference to the haulage roads?

31475. Yes?—If they are kept free from obstruction.

31476. It says, "shall make careful inspection of the whole roadways from the pit-bottom throughout the mine where men are at work or pass": that applies to what you call the gates also, because men have to pass along the gates?—I prefer in that connection that a special examination be made periodically. There is the daily examination at present.

31477. Examination is another matter: you see that is done: but as regards what you think ought to be done, that rule I imagine would meet your view and do all you require—if it was carried into effect?—If it was carried into effect.

31478. We come now to the question of winding enginemen. You say they ought to have certificates of competency. Are they competent at present?—They are not compelled at present to hold certificates.

31479. I know they are not, but are they in your opinion competent for their work, notwithstanding that. Can you point to any accident which has occurred in your district owing to an engineman not being competent, or making a mistake?—I could point to accidents that have occurred, decidedly.

31480. I mean accidents that have occurred owing to the incompetency of winding enginemen. Accidents may occur from various reasons?—Yes, they may. Some time ago, in connection with the Hemsworth Colliery, we had very serious complaints on behalf of the men as to the qualifications of the men under whom they were expected to ride.

31481. They complained and said they were not properly qualified?—They complained that they were not properly qualified and that they were bumping them up and down in the shaft.

31482. You say that those men complained to you that the winders were not up to their work?—They did.

31483. And you think it was a just complaint?—Yes, at the time we thought it was a just complaint.

31484. Did you complain, or did anybody on the part of your Association complain, to the managers?—Yes.

31485. What happened?—The inspector was written to, I believe, and he came to the colliery: but I think in spite of the complaints of the men there was no alteration.

31486. The same men were kept on?—The same men were kept on.

31487. Then I suppose the inspector satisfied himself that in his opinion the men were competent men: I should imagine he looked into the matter. Then you say that cages used for the purpose of lowering or drawing men should be provided with gates to prevent men falling or being thrown out. It has been suggested to us, I think, by one witness, that these gates might by a possibility be the cause of an accident instead of preventing it, and that there was an instance in one case of a man desiring to jump out of the cage suddenly to prevent an accident being stopped by the gate, and either losing his life or being badly injured—I forget which. However, in your opinion, the advantages would outweigh the disadvantages very greatly?—In my opinion the advantage is with the gate. We have a great many cases of men falling out or being thrown out.

31488. (*Mr. Smillie.*) You can give some recent instances?—Yes, we had a very serious case within the last month.

31488A.—(*Chairman.*) I know quite lately there were several men killed?—Yes.

31489. Do you know of any other case of men being killed by reason of the want of a gate?—I have not the cases in mind, but I think it is pretty well a matter of common knowledge that men have been thrown out of the cage at different times, and have also fallen out through attacks of sudden sickness.

31490. Then as regards ambulance under Rule 34, you say that that rule is too vague and that proper ambulance appliances should be kept in each district, and men should be employed near to the ambulance station who have qualified in ambulance work?—Yes.

31491. You say that it should also be made compulsory for the owners to provide an efficient ambulance carriage for the purpose of removing injured workmen to their homes. I understand that things are becoming much better as regards the ambulance service. Are not the mine owners taking up the matter now?—Yes, it has been taken up better of late years.

31492. But still you think there is a good deal of room for improvement?—I think it is desirable that in the different districts of the mine there should be some ambulance provision for each separate district. At the present time I know of cases where the ambulance appliance is merely kept at the pit top a mile or a mile and-a-half away from where the men are working.

31493. You think there ought to be ambulances down below at certain separate distances, is that so?—Yes, in the separate districts of the mine.

31494. Down below and not above?—Yes.

31495. How would you define a district for which an ambulance ought to be provided? Would you say, for instance, that an ambulance should always be within a quarter of a mile of every man who was working, or what sort of provision would you desire?—The collieries are generally split up into districts, and a deputy would have charge of a certain district.

31496. You would take that as a district and suggest that each deputy's district should have an ambulance. Is that your suggestion?—Yes, I think that would be a good idea.

31497. With regard to safety lamps you say, "I am of opinion that it is desirable that the use of safety lamps should be extended to all collieries where gas is found." Do you mean in however small quantities gas is found?—Yes. I should say where there is a report of gas safety lamps should go in.

31498. And that they should remain in for ever—or should there be any provision for taking them out again?—While gas remained in the mine, I should say lamps should remain in.

31499. That they should always remain in—that there should be no provision that they should ever be taken out again, even where gas was not seen for some years?—While gas was found in the mine decidedly lamps should continue to be used. If there was no gas in the mine of course it would be another matter.

31500. But where gas was once found there would always be a possibility of finding more?—Just so.

31501. So that you would say that wherever gas is found, the mine should always afterwards be worked by safety lamps. That is what I understand you to want?—Unless it could be clearly proved that there was no gas existing of any kind in the mine.

31502. If gas was found in a mine what sort of proof could you have that no gas would ever be found in the mine?—It is not probable that that report would ever come.

31503. (*Mr. Smillie.*) Supposing your report books were signed that there were no signs of gas for six months, would you not take it that if the report was an honest one.

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there was no gas in the pit?—If the report book was signed say for 12 months (I would not be satisfied with six months) that no gas was found in that pit, then the matter might be reconsidered.

31504. (*Chairman.*) Then perhaps it might be open to discussion as to whether the use of safety lamps should be abolished?—The matter might be reconsidered.

31505. With regard to enquiries you say, "I consider it desirable that when a member of a trade union is killed in the course of his employment, his society should have the right to be represented at the inquest, and to take part in the proceedings." Section 48, Sub-section 8, says that "Any relative of any person whose death may have been caused by the explosion or accident with respect to which the inquest is being held, and the owner, agent or manager of the mine in which the explosion or accident occurred, and any person appointed by the order in writing of the majority of the workmen employed at the said mine, shall be at liberty to attend and examine any witness," and so on. That is not enough for you?—No.

31506. But then any workman might appoint any member of the trade union to attend under this provision, might he not?—"any person appointed by the order in writing of the majority of the workmen employed at the said mine." I suppose you would have no difficulty in getting the majority to agree as to a union official or someone to represent the workmen? Is there any difficulty found in working that provision?—We have a difficulty. We have a coroner in our district who has held that an order should be signed by the majority of the workmen. It is difficult to get an order signed by a majority of the workmen.

31507. The section says, ". . . appointed by the order in writing of the majority of the workmen." You think that the rule might very well be altered to say that certain persons should be definitely considered to be representatives of the men, and that say a reasonable number of the men, a dozen or twenty, or something of that kind, should be empowered to say, "We appoint so and so on our behalf," and unless the other men objected that appointment should hold good without your being compelled to show that the majority of the workmen desired that particular person to act for them?—We think that where a man is a member of our society, we should have a right to attend at the coroner's inquest.

31508. Which man? There would be a good many men.—Any man who might happen to be killed and who is a member of our Society.

31509. You mean that if a member of your Society is killed, any member of your Society could go and represent him. But surely that would lead to a good deal of confusion?—No, we do not seek that. We ask that as a Society we should have a right to be represented.

31510. That is to say, you would not call upon the workmen of the pit to specially appoint a man, but you would say that when a member of your Society was killed the secretary of the Society, or any responsible official, could give notice in writing, say to the manager, that so and so was appointed to attend the inquest and that that should be held sufficient?—Yes—that he was appointed by our Society, and that the man was a member of our Society and that he had given notice to the manager.

31511. You think that if the manager got a note from a responsible member of your Society to say that so and so was appointed to represent the man, it ought to be the law that that should be sufficient for the coroner to admit him to the proceedings to represent the relations of the man who was killed?—Yes, that if he gave proof that he was appointed by the Society, he should be admitted to the inquest and take part in the proceedings.

31512. You say you have had difficulty—that coroners have said you must show that a man has been appointed by the majority of the workmen, and that it has been rather difficult to show that?—Yes.

31513. You say also that the inquiry provided for in Section 45 should be held in serious accidents causing loss of life, when required by either side?—Yes.

31514. That is as to formal investigation when directed by the Secretary of State. You say "when required by either side." What evidence do you think would be necessary in order to show that further inquiry was required by one side or the other? Would you say that any person who was at all interested—any relative of the person who was killed—should have the power to compel the Secretary of State to hold an inquiry, or how would you work it? Would you say that if anybody was present, for instance, at the coroner's inquest and dissented from the verdict, or dissented from some of the findings of the jury with regard to the cause of the accident, or anything of that sort, he should be able to force a second inquiry, or how would you limit this right to have a second inquiry. You must limit it somehow, I suppose. I want to know what you mean by "when required by either side." "Either side," means, I suppose, either in the interests of the man who was killed or in the interests of the owners or managers of the mine?—Either the workmen's or the owner's side.

31515. You mean, I suppose, that if one party was dissatisfied with the verdict of the jury on one ground, or another party was dissatisfied with the verdict of the jury on another ground, either party who was dissatisfied might have an inquiry as a matter of right, as I understand?—We seek to be represented at the inquest first of all.

31516. But supposing you are represented at the inquest, that there is a certain man who has been deputed by the Trade Union to represent the interests of the men we will say at the inquest: then suppose that man who represents the interests of the men is dissatisfied with the verdict of the jury, or with the reasons they gave, or as to the way in which the inquiry has been carried on, or with some other matter: would you give him power to insist upon a second inquiry: supposing everyone else agreed that it was all right, ought this representative of the man, in your opinion, to have the power to force a second inquiry, even although everybody agreed with the first inquiry?—I would not give him the power, but give his Society the power.

31517. Then he would issue a report to the Society to say that he was dissatisfied, and then the Society would look into the matter, and if the Society came to the conclusion that he was right and that the inquest was unsatisfactory, the Society could by a vote compel the Secretary of State to hold a second inquiry. Would that be what you wish? First of all, you would, I understand, give the Society power, on the representation of the man who represented the Society at the inquest, to call, as a matter of right, for a second inquiry?—Provided the Society confirmed his opinion.

31518. Yes, I say supposing the Society confirmed his opinion; but then it is suggested to me that he might not belong to the Society. How would you work it then: would you allow any relative to ask for a second inquiry?—Well, I am representing the Society.

31519. You do not feel called upon to give an opinion as to what should happen in another case. I suppose you would say that with regard to the men's side, where a man is a member of your Society, the Society ought, if a member of theirs is killed, to have the power, if they think right, to force upon the Secretary of State a second inquiry. That, I understand, is your opinion. But now supposing the other side are dissatisfied, supposing that the mineowner or a man against whom a verdict of manslaughter has been recorded objects to the way in which the inquiry has been conducted, would you allow the man against whom a verdict had been recorded, or any mineowner or mine manager who was dissatisfied in the same way to force an inquiry by the Secretary of State?—I say "either side"; the other side is the mineowner, in my opinion.

31520. (*Mr. Ratcliffe Ellis.*) Supposing there is an inquiry held, and the court comes to the conclusion that a man ought not to have been sent to trial for manslaughter, what would you do then? Would you give it power to set aside the verdict of the coroner's jury, or how would you deal with it? It would be a complicated state of things. Here is a man committed for manslaughter who would in the ordinary course take his trial at the Assizes, and of course that has to be stopped, and he would say, "I want to appeal from the verdict of the coroner's jury and I want an appeal to the Home Office," and, then, supposing the result of the inquiry was the conclusion that he should not be committed for manslaughter, would you do away with the verdict of the jury, or in what way would you deal with that committal?—You see I am not a lawyer.

31521. But then you are offering suggestions upon the matter.

(*Chairman.*) I suppose you would say that the lawyers must fight that out amongst themselves.

(*Mr. Ratcliffe Ellis.*) A very complicated question would arise under those circumstances.

(*Witness.*) You get there the question of a man's criminal liability in law.

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(*Chairman.*) If a man had a verdict of manslaughter found against him by a coroner's jury, and if he was rehabilitated by a subsequent inquiry, I take it the strong probability would be that even if that prosecution went on the grand jury would throw out the Bill, so that I do not suppose there would be any very great difficulty in dealing with it as a matter of fact.

(*Mr. F. L. Davis.*) But I think Mr. Ellis's point is this, that if the Federated Society is going to have the chance of saying "We will have another inquiry," anybody interested should also have the same opportunity?

(*Chairman.*) I understand the Witness to say that he would put it in the power of the mine owner or manager—he does not exactly say by what process, but by some process or other—to insist upon a second inquiry if dissatisfied with the inquest.

(*Witness.*) Just so.

31522. (*Chairman.*) I do not imagine that you would object to the form of inquiry when it takes place, because the sub-section dealing with it is: "The Secretary of State may appoint a competent person to hold the investigation, and may appoint any person or persons possessing legal or special knowledge to act as assessor or assessors in holding the investigation." You would have no objection to that, I imagine. Then Sub-section 2: "The person or persons so appointed (hereinafter called the court) shall hold the investigation in open court, in such manner and under such conditions as the court may think most effectual for ascertaining the causes and circumstances of the explosion or accident, and enabling the court to make the report in this section mentioned." Would you be satisfied with a second inquiry which was held by a person appointed to hold the inquiry by the Secretary of State, or would you say that there ought to be some permanent board established which would hold the inquiry rather than the person appointed for that purpose by the Secretary of State?—I have not gone into the question of the Board. What we are complaining about is not the present inquiry, but that we have no right to that inquiry.

31523. Then, at all events, you are not authorised by your Society to make any suggestions as to the nature of the inquiry. The nature of the inquiry is fixed under Section 45 of the Coal Mines Regulation Act, 1887, and, so far as that goes, you are satisfied with the nature of the inquiry that is held, as I understand, but what you want is to be able to compel the Secretary of State to hold the inquiry under certain circumstances?—Yes, under certain circumstances.

31524. You do not complain of the nature of the inquiry at all, or of the method of proceeding under Section 45, as I understand. That is not a question, apparently, which you have gone into much; you have not gone into the question of the kind of investigation set up under Section 45?—No.

31525. You merely say that you wish Section 45 to be put into operation oftener than it is?—That is so—with regard to the right of these inquiries. No doubt we thought it desirable to have the right before we discussed the constitution of the inquiry.

31526. However, now and then there is an inquiry under Section 45, so that if you are dissatisfied with the method of inquiry under the Act of Parliament we should like to know what objections you raise; but, apparently, that is not a point which you have considered?—No.

31527. (*Mr. Cunynghame.*) I am not going to ask too much about Section 45, but there seems to be an impression among the Trade Union societies that Section 45 has not been used sufficiently—that there have not been enough of these inquiries. Is that so?—It is the opinion of our Society that in these cases of serious accidents the fullest inquiry possible should be made.

31528. Of course it is necessary in the case of an accident to find out about it, but I am asking you another question: is it the impression of your Society that Section 45, to which your attention has been called, has not been sufficiently used—that the powers under it have not been exercised sufficiently?—Yes, that is our opinion.

31529. Can you mention any case which gives weight to that opinion and which supports that opinion? Can you mention any case of an accident in which an inquiry was not held and in which you think an inquiry ought to have been held. I am not aware of one myself. I am not laying any trap for you. I do not know of such a case, but I should like to know whether you do?—I am not prepared to quote a case at the present time, but there is a general impression abroad that there have been cases of that description: and the very fact that we have not the right to demand an inquiry may cause us not to make that application—may affect the question of the application.

31530. I do not see what the fact that you have or have not a right to demand the inquiry has to do with the question whether you are able to name any case in which an inquiry ought to have been held that has not been held. That is what I want to come to. You cannot name any case at present?—Not at present.

31531. I do not think there has been any application made by your Society to the Secretary of State for an inquiry?—Not that I am aware of.

31532. (*Mr. Enoch Edwards.*) The Chairman, in dealing with the early part of your statement, asked you whether you represented the Yorkshire Miners' Association?—Yes.

31533. You are a member of their executive, I suppose?—I am the vice-president of the Society.

31534. You come with the knowledge and consent of the executive of your Society?—I am appointed by the Society.

31535. When you were asked about the inspection you expressed an opinion about Yorkshire and said you thought Yorkshire would require twice or three times as many inspectors as there are now?—Yes.

31536. What is the number of men employed in Yorkshire underground—about 100,000?—I should say it is over that.

31537. You have now three inspectors?—Yes.

31538. A chief inspector and two assistant inspectors?—Yes.

31539. You are familiar with the text of the Bill that was before the Miners' Conference. Are you familiar with the clause with reference to inspectors, which proposes one for every 10,000 men?—Yes.

31540. Twice or three times the number of inspectors would not give one for every 10,000 men?—No, it would not, but I think I mentioned 10 inspectors.

31541. I understood you to suggest that the county should be divided into three districts rather than being one district?—Yes.

31542. There you get a chief inspector and an assistant under the chief inspector in each district?—Yes.

31543. What amount of time will be taken up now by the inspectors in travelling in Yorkshire? What distance do they live from the collieries?—Our coal area is very large. I should say it extends for at least 50 miles. That is under the control of these inspectors, consequently a very large amount of time is taken up in travelling to the respective collieries.

31544. They do not live all in one centre?—No. Mr. Mellor lives at Outwood, and Mr. Walker at Doncaster. Those places are 18 miles apart.

31545. If the district was divided you would have less travelling?—Yes.

31546. The inspector would be able to do his work in less time?—Yes.

31547. You have no complaint to make about the present inspectors or the way they do their work?—We do not complain about the work so far as it is done, but we complain that they are not able to do it. Take a case of an accident: an inspector may have to travel possibly 30 miles to the scene of the accident, and when he gets there in all probability he has to change and go down the colliery, and when he gets to the scene of the accident it is time to come back. We contend a very large proportion, in fact pretty well all the time of the inspectors is taken up in enquiring into cases of fatal and serious accidents, and in attending inquests, and that at the present time there is little or no, what we should term surprise inspection.

31548. You have no complaint about the inspectors, but you think that the work is more than they can do?—That is so.

31549. In dealing with that class of inspection by the workmen I am not sure whether the Chairman understood exactly what was the practice now. What you said was, I think, that there was no rule laid down, or law, as to how these men should be paid?—I made that statement.

31550. The workmen may appoint men to inspect on their behalf, but there is no provision made for payment of their expenses?—No, it says "at their own cost," but it makes no provision for that cost being collected in any way.

31551. Usually they are paid out of the checkweigh fund?—Yes.

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31552. You suggest that there should be some machinery whereby the men should be paid?—Yes.

31553. Do you think seriously after all that that has prevented men from examining collieries?—No; the chief factor in preventing the men examining the collieries has been the fact that no man has been available except the man who has been employed at the coal face in actual employment—a practical miner.

31554. It is not an unusual thing for a man or two men to examine a colliery or a number of pits under the same firm?—No.

31555. The employers do not raise objections?—No, not that I am aware of.

31556. You suggest that the men should have a rather wider choice, including the checkweighmen, if they thought fit?—Yes, that the men should have the right to choose the checkweighman where the checkweighman has been a practical working miner.

31557. You say your checkweighmen are, as a rule, taken from the colliers in the pit?—Very few, I should say, but are men who have originally worked at the coal face.

31558. If you had a checkweighman who had no experience in the pit, you would not suggest that he was a competent person?—Not at all.

31559. I understood you to say with reference to fines that your county is opposed to the imposition of fines for offences in the coal face?—Yes.

31560. Your people would prefer that instead of the enforcement of fines, breaches of the rules or disobedience should be carried to the court?—Yes. We object to the colliery owner having the right to fine: it does not confine itself to breach of rule entirely.

31561. You have had considerable experience yourself in the pit?—I have worked in it all my life.

31562. With regard to what you have to say about manholes and haulage roads, in your experience is there an amount of carelessness in the roads, coal and debris being allowed to lie about and block it up?—Yes.

31563. Is that what you mean by the haulage road being kept clean?—It is what I mean by "kept free from incumbrance." These different obstructions should be kept clear of the haulage road. There are collieries where coal is hauled a good distance, and a certain amount of coal falls from time to time.

31564. They are expected to clear it away. It is not allowed to lie about?—No.

31565. You think that a double road should be made, but it might not be possible in a haulage road to make a road for travelling because of the roof?—I think it would be practically impossible in all cases to provide a double road and a travelling road.

31566. They usually make a road wide at the start?—At the start.

31567. If the roof will stand the pressure you are all right?—Yes.

31568. It may be the conditions are such that they could not have it because of that?—Yes. Where the roof was brittle they could not get that result.

31569. Have you any complaint about the manholes in Yorkshire?—We complain that the manholes, especially on the roads where the drivers are, and on some of the jinny roads, are not as frequent as we should like them to be.

31570. Do you mean the manholes?—Yes.

31571. They are placed now according to rule and law?—Yes, but there are exceptional circumstances. You get a jinny (with a rope swinging in it) that the men have to travel. It is difficult. A manhole may be *that* side and another manhole *on this* side, but we believe that the manholes should be all on the one side. There are the ropes to contend with, and a man does not know on which side the manhole may be, and the rope may be swinging a yard high in the jinny road, which makes it difficult to get to the manhole, and makes it more important that the manholes should be at frequent intervals.

31572. You consider that according to the present law manholes are placed too far apart. Is that what you mean?—Yes. We do not complain, so far as I understand, that the present law is not carried out with reference to manholes, but we think it is desirable that there should be more—that it should be stricter.

31573. You were asked a number of questions about a formal investigation under Section 45, but evidently you had not given sufficient thought to it to enable you to give a complete reply to the Chairman and the other Commissioners. You have been connected with the Yorkshire Miners' Association for many years?—Yes, ever since I started work.

31574. You were asked by Mr. Cunynghame as to whether you had ever had a case in Yorkshire where you applied for this special inquiry, and were refused. You did not know that you had?—I said that I could not state the case.

31575. He asked you whether you had had a case and had been refused, and you said "Not to my knowledge"?—I could not quote a case.

31576. You have heard discussed that the Miners' Federation have applied and been refused?—Yes.

31577. That would be what was operating your mind?—Yes.

31578. Although it had not happened in Yorkshire, it had happened in the Federation?—It had happened in the Federation of which I was a member.

31579. (*Mr. Ratcliffe Ellis.*) Upon the subject of inspection have you formed any opinion—I did not gather that you had—as to the number of workmen who should be comprised in an inspector's district?—We should say roughly 10,000, but I take it in connection with forming an inspector's district that the size of the respective collieries would have to be taken into consideration.

31580. Yes, and their situation?—Yes.

31581. You think something like 10,000 men should be in one inspector's district, not more than that?—Yes, as an average.

31582. In that inspector's district your scheme is that you would have a chief inspector?—Within the 10,000.

31583. In that district. That an inspector's district should not exceed more than 10,000 men, and in that district you would have a chief inspector, to begin with. I want to see if I understand your scheme?—No.

(*Mr. Enoch Edwards.*) He rather suggested Yorkshire should cover three districts.

31584. (*Mr. Ratcliffe Ellis.*) I will take Yorkshire. I want you to explain your scheme. You suggest some area all under a chief inspector, three assistant inspectors and six sub-inspectors: that would be 10 inspectors?—Yes.

31585. What number of men should that inspection extend over?—At the present time we have three inspectors for Yorkshire. If I were to outline a scheme I should say we divide it into three sections, with a chief inspector.

31586. In each section?—A chief inspector over all.

31587. How many men have you in Yorkshire, East and West. You are dealing with East and West, are you not?—Yes.

31588. How many men have you in Yorkshire, roughly speaking?—From 90,000 to 100,000, underground. I suppose the inspector supervises those above ground too.

31589. He supervises above ground and underground.—The quarries as well. Do they not take those?

31590. Yes. You would have one head inspector, one chief inspector, in Yorkshire?—Yes.

31591. You would have three assistant inspectors, and six sub-inspectors, as you term them, and divide the county into three divisions. Is that your scheme?—Yes; I think it would be a practical scheme.

31592. Will you take number one division. Is that immediately under the charge of one of the assistant inspectors? There are to be three assistant inspectors, I understand. Do you follow? Take No. 1 division: is that in charge of one of the assistant inspectors?—He would be at the head of his district.

31593. That is what I am asking you?—Under the supervision of the chief inspector.

31594. The chief inspector is at the head of all. Take No. 1 district. That is under the immediate supervision of an assistant inspector?—Yes.

31595. His duties are confined to that particular district I suppose, that division, the No. 1 division?—I take it it would be his division.

31596. I am asking if his duties would be confined within the limits of No. 1 division. Do you follow? I am asking you that?—Well, I should see no objection to his acting under the discretion of the chief inspector.

31597. But I want to know what your view is. Is he to inspect the collieries all over Yorkshire, or confine

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his inspection to the collieries in the division No. 1 to which he was allocated?—I should say that his duties should be allocated to division No. 1 unless he went to another colliery under the direction of the chief inspector.

31598. He is to go where the chief inspector sends him?—Yes. but his primary duty would belong to his own district.

31599. His primary duty is No. 1, but he is subject to be sent by the chief inspector elsewhere?—Yes.

31600. With regard to those two sub-inspectors (there are six altogether) would they be also allocated to a particular district?—I should not object to three.

31601. You have not got enough then; there are only six in Yorkshire. Would you have nine sub-inspectors?

(*Chairman.*) He says he would not object to nine.

31602. (*Mr. Ratcliffe Ellis.*) He said six, and that is why I took six. Do you think six are enough? Would two be enough for each of these divisions, or do you think that there ought to be three in each division?—I should say two or three, as circumstances might require. One district might require stricter supervision than the other.

31603. What is your view of the object of inspection?—Safety of life and limb.

31604. At the present time the Coal Mines Act puts the responsibility on the management? Is that so?—Yes.

31605. Do you want to remove that responsibility from the management, or leave it with the management?—We do not want to remove it from the management.

31606. Why not?—Because we believe that the management are responsible for the colliery.

31607. I want to know why you do not want to relieve them from that responsibility?—I will give you my reason: because they are the people appointed, and they should be responsible.

31608. Do you believe it is the safest system that the management should be responsible?—I believe the safest system is for the management to be responsible, and for the Government inspection to be so provided for that the inspector can visit from time to time, and pay what we should term surprise visits, to see that the rules are being carried out, and that the management are doing their duty.

31609. You think safety is best secured by placing upon the management the responsibility for the safety?—That is the first position, I take it.

31610. Do you agree with me that safety is best secured by placing upon the management the responsibility for safety?—The first responsibility; put it in that way.

31611. Who else is responsible?—I take it the workman. You place a certain amount of responsibility upon the workman; he is responsible for his own working place. The management is responsible for the general safety of the mine, and the inspector, I should say, above him would be responsible for seeing that the manager did his duty.

31612. Do you propose to place the responsibility—when I say "responsibility" I mean a responsibility for which a man may be punished—upon the inspectors?—I do not hardly follow you there.

31613. You say that there are three persons responsible in your view: the management, the workmen, and the inspectors. If the management fail, they are responsible now and can be punished for failing; if the workman fails he is responsible and can be punished for failing. Do you say if the inspector fails that he should be responsible and should be punished?—I should say that the inspector should be there to see that the workmen and the managers carry out the Coal Mines Regulation Act.

31614. This is an important question. Do you go so far as to say you would place on the inspector a responsibility for which he should be answerable in the case of an accident, and that he should be liable to be punished, just as the manager and the workmen are if anything goes wrong?—I do not hardly follow you in that question. I do not want to evade the question, but I take it that the inspector would be there and would be inspecting those collieries periodically, and paying surprise visits to those collieries. I do not see how he could be answerable very well for circumstances that occurred when he was not there.

31615. The manager would not be answerable unless he is found to have neglected his duty, and the workman would not be answerable unless he is found to have neglected his duty. Supposing the inspector is found to have neglected his duty, would you make him responsible just as the manager and the workman are responsible now?—If the inspector neglected his duty, I suppose he would be responsible.

31616. He is not in that way. Would you make him liable to be prosecuted, just as a manager?—If he neglected his duty he should be prosecuted.

31617. That is your view. Your view is this principle, whether it is right or wrong, ought to be altered, and there ought to be a responsibility put on the inspector for the proper management of the mine as well as on the employer and the workmen?—I do not say that.

31618. What do you say?—I say that the inspector should be appointed, but he could not be made responsible for the management of the mine.

31619. The responsibility is still to rest with the owner and with the workmen?—That is so.

31620. You should give him a fair chance, if he is to be responsible. If you have these inspectors going there and inspection constantly taking place, do you not think it would rather lessen the feeling of responsibility upon the management?—No.

31621. If a man goes there constantly would it rather not tend to lessen the responsibility of the firemen, for instance, or officials of that sort, who are responsible for the mine now?—There is no suggestion on our part that an inspector should be there constantly.

31622. Very well. I will go by steps. I daresay we agree. Do you agree with me if they were there too frequently that it might have that tendency?—No, I do not. Of course it is all a matter of what you mean by "too frequently."

31623. They might be there so often, and the very frequency of their visits might tend not to safety but to danger?—The work of the inspectors, to my mind, tends to safety.

31624. Supposing they are there finding fault here and finding fault there, do you not think that might lessen the responsibility of the management?—I do not see it. Of course it is a matter of what you mean by "too frequently."

31625. Do you think that there would be an objection to an inspector going down every day? I want to put an extreme case to you?—Do you mean continuously throughout the year?

31626. Yes?—I should say it would be an extreme case if it was necessary for an inspection of that kind. We do not seek for an inspection of that kind.

31627. You do not seek for it because it is not necessary. That is so: it is not necessary?—We seek for an adequate inspection and we do not seek for an inspector to be going down a colliery every day, because we realise that the number of inspectors we suggest would not allow them to go down every month.

31628. Do you think it would be necessary? Would it conduce to safety if an inspector could be down every day?—We are not seeking for an inspection every day.

31629. You would rather not answer that question. What is to be the qualification of a sub-inspector?—I should say, first of all, that he should have practical experience as a miner. I prefer that he should be at the coal face when he qualifies by his examination.

31630. He is to qualify by an examination?—He should, in my opinion.

31631. Which the Home Office should prescribe. Do you think he ought to have a first-class certificate?—I think that he should have qualifications equal to the present under-manager, who is very often responsible for the safety of the mine.

31632. He has a second-class certificate?—Yes.

31633. Do you think that the men who have second-class certificates are suitable for discharging the duties of a mines inspector?—You first of all qualify them.

31634. The second-class certificate should qualify them?—I said equal to a second-class certificate. I did not say a second-class certificate. I take it in an examination by the Home Office you could put out a syllabus for an examination that would prove whether a man was qualified for the work or not.

31635. Do you seriously think a man only equal to passing a second-class certificate examination or its equivalent is suitable to discharge the duties of an inspector of mines?—The present second-class men are qualified to take charge of them.

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31636. You think an inspector of mines would be sufficiently qualified if he could pass an examination for a second-class certificate, or its equivalent. What would those sub-inspectors have to do?—He would have to inspect the mines, I take it.

31637. For what?—For danger.

31638. What are the various sources of danger he would have to look for?—And for the carrying out decidedly of the provisions of the Coal Mines Regulation Act.

31639. The whole Act of Parliament. Really he would have to do the same duties as the chief inspector would have to do, so far as inspection goes. He would have to understand ventilation, gases, and all the other sources of danger in connection with the working of mines?—Yes.

31640. He would have to see if the management was carrying out the Act and to call the management's attention to defects. Do you think a man would be of any use doing that work who was not equal to doing more than pass a second-class certificate such as an under-manager?—At the present time you have the manager.

31641. Will you answer my question first, and give any explanation you like afterwards?—I think a man that passed the examination of the Home Office would be qualified for the work.

31642. If you give the Home Office the right to prepare the examination sufficient to qualify a man. I want to see what is the qualification you suggest. Do you consider a man equal to discharging the duty of an inspector of mines would be a man whose limit of qualification is being able to pass an examination for a second-class certificate?—As a sub-inspector within the district under the control of the assistant inspector?

31643. Call him what you like. His duties must be those of a chief inspector *qua* examination. Very well: I will not press you?—I do not wish to evade the question. These questions come, and you do not want to give an answer without due thought. As a sub-inspector under the direction of the assistant and chief inspector, I consider that a man who could pass an examination put forward by the Home Office on lines similar to the examination for a second-class certificate would be efficient.

31644. You say under the direction of the chief. How is the chief inspector to direct him?—Is he to teach him what to do?—No.

31645. All the chief inspector could say would be "You go and make an inspection of a certain colliery." Would you expect the chief inspector to mention certain dangers and tell him how to find them out?—What is the present system of management? Do you mind my asking you that?

31646. I am talking of inspectors. You say you think a man of that sort would be efficient under the direction of the chief inspector. I want your view as to the directions the chief inspector would give him to assist his defective qualification?—I do not admit his defective qualification for the work he has to do.

31647. I thought we were agreed that he is qualified to do everything a chief inspector has to do below by way of inspection. There is only one examination, whether it is done by a chief inspector or a sub-inspector?—He would have to inspect the workmen, the firemen, and the deputies.

31648. Do you say he would have to inspect to see the whole of the Coal Mines Regulation Act was carried out?—Yes.

31649. That involves more than a knowledge of getting coal?—What is the present system of management?

31650. I want you to tell me this. I gather from you that these sub-inspectors would be less qualified than the chief inspectors. Is that so, or should they be equally as qualified as the chief inspectors?—What is the present position?

31651. Will you answer my question?—You said I might make a statement.

31652. Will you answer my question first. Is your view that these sub-inspectors should be less qualified or equally qualified with the chief inspector for the work of inspection?—My idea with reference to these inspectors is that they should be fully qualified for the work they have to do.

31653. The work they have to do is, as you say, to see that the Coal Mines Regulation Act is being carried out. Can they see that if they are less qualified than a chief inspector. If you say they ought to be equally qualified with the chief inspector I have not another word to say to you about it.—They should be qualified in the details of the working of the mine and have the working experience. I do not say that it is necessary they should be so well qualified in the theoretical mining and in some, perhaps, of the technical points in connection with the work———

31654. Will you give me an instance of what you mean by "theoretical mining"?—I will give you an instance of what we find in mining at the present time, so far as the management is concerned.

31655. I would rather you gave me an instance of what you call the technical qualifications?—That will help me to explain my position.

31656. Very well: go on.—At the present time you have a manager with a first-class certificate in charge of the mine and everything in connection with the mine. You may, so far as the supervision of the mine underground is concerned, have an under-manager with a second-class certificate responsible for the working and safety of that mine. Then underneath him, and taking his separate district, you have a man without a certificate at all, going round that district and reporting on the safety of that mine and on the work of those men, and taking his district under his own charge. I take it there are working miners who could pass an examination and qualify themselves to examine the work of these men.

31657. (*Chairman.*) May I clear up, at all events, my notions in regard to this matter. I understand the witness to say that these sub-inspectors should have the same relation to the inspectors very much as the under-manager has to the manager?—That is so.

31658. The under-manager may have to perform all the duties of a manager, and therefore, according to your suggestion, the under-manager ought to have a first-class certificate as well as the manager. He says that is not the case with regard to under-managers, neither is it necessary to be the case in the case of sub-inspectors. Is that not your view? You want to draw a comparison between the respective positions of under-manager and manager, and between the respective positions of chief inspector and sub-inspector?—Yes.

31659. (*Mr. Ratcliffe Ellis.*) It must be remembered that this inspector is the man who has to put right the chief manager; the Government inspector, whatever you may call him, is the man who is to criticise the chief manager of the mine. That is the object of the Government inspector. Do you think it would be desirable that the chief manager of the mine, a man of considerable skill, and who has a first-class certificate, should be told what he had to do by an underlooker, a man only qualified to act as an under-looker?—I see no objection to a man with the qualifications I have outlined examining the mine under the direction of his inspector, on the same lines as the under-manager acts under the direction of the manager.

31660. Do you know how the inspectors are appointed now?—I have read it in the rules, I believe, but I am not prepared to say at the present moment.

31661. Do you know that they are appointed after examination by the Home Office?—Yes.

31662. If you look at the Act of Parliament, Rule 39, you will find that the Home Secretary may appoint as many inspectors as he likes. The only qualification is that they must be fit persons?—Yes.

31663. Are you satisfied with that as it is, or do you want to alter it and say that he must appoint a certain class of persons, whether fit or not, or will you leave it in the hands of the Home Secretary to say what is a fit person for the duties of a mines inspector?—I am not satisfied with the system at all as it is.

31664. Do you mean you are not satisfied to leave with the Home Secretary the appointment of fit persons, but that you must tell him the particular class he must appoint?—I have endeavoured to outline my views in regard to this matter.

31665. You cannot answer my question any further than that?—I have endeavoured to outline my views with reference to this matter. In my opinion it is desirable that we should have men as inspectors who have had practical experience at the coal face, and who shall decidedly satisfy the examining authority as to their qualification for the position.

(*Mr. Smillie.*) He has not suggested that persons should be appointed who are unfit.

(*Mr. Ratcliffe Ellis.*) It is a question of what fitness means.

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(*Mr. Smillie.*) He gives a definition of that with which you do not agree.

31666. (*Mr. Ratcliffe Ellis.*) With reference to inspection under Rule 38, if you had these additional Government inspectors do you agree that it would be less necessary to have the inspection by the men under Rule 38? That has been suggested here?—It would be less necessary, but at the same time I should retain the clause.

31667. You say a man can only inspect now who works at the face?—That is the law. That is, at all events, as it has been rendered in court.

31668. It is "a practical working miner." Do you consider a man who has worked at the face and gone from the face to be a fireman, for instance, or a roadman, is a practical working miner?—Yes.

31669. Would he not be qualified?—Yes, but he is not qualified under the present law as it is rendered at the courts.

31670. Why not?—Because he is not a practical working miner.

31671. I understood you to say that he would be a practical working miner if he had gone from the face and was engaged on the road.

(*Mr. Smillie.*) He means he is not considered under the Act a person who can make that examination unless he is working as a practical working miner at the time.

(*Witness.*) At the coal face.

31672. (*Mr. Ratcliffe Ellis.*) Is that the construction put on this? It is only a man working at the coal face. Would not such a man be much less competent to make an examination than a man who was actually working in the roads?—I am under the impression—I may be wrong in regard to that matter—that the courts in Yorkshire have rendered it that he must be a man actually working at the coal face.

31673. I may be wrong, too, but I think they rendered it that he must be a man who is practically working in the pit at the present time?—What is the clause?

31674. It is General Rule 38. You would not hold a man who had worked at the face and had gone to work on the roads was not a practical working miner?—No.

31675. You want it to be extended to a man who is or who has been a practical working miner?—Yes.

31676. Why do you want to go beyond the class of practical working miners, beyond the class of men who are actually working in a pit somewhere?—Because we feel that it is desirable that this inspection should be made by men who are independent of the colliery proprietors.

31677. You suggest the checkweighman. Of course he would not be entitled to make an inspection now for other reasons. He is only entitled to do what he is allowed in the place to do?—Of course this clause excludes him.

31678. Yes, this clause, and another clause, too. The clause of the Act with reference to checkweighmen would exclude him. Would you alter that and allow the checkweighmen to have a right to make these inspections?—If the men thought fit to appoint him.

31679. You want two alterations. First of all to extend it to people who have been practical working miners, and then to have a special exemption in favour of checkweighmen from the general law with reference to checkweighmen?—Of course you submit a point with reference to the appointment of checkweighmen. I take it if the men appoint him also to inspect the mine——

31680. Up to the present he would not be allowed?—But if the clause read "are or who have been practical working miners," they would.

31681. That would not help you?—It has never been tested, as far as I remember, from that standpoint.

31682. I suggest to you that unless the clause under which the checkweighman is appointed is altered—he is appointed to do a particular work, that is with reference to the weight, Section 12 of the Act appoints him to do certain duties—he would not be entitled to inspect the mine?—Not if appointed by the men.

31683. I should say not. You want it to be made that he could inspect?—We want it to be made so that a man who is, or has been, a practical working miner, has a right to inspect, provided the men appoint him.

31684. Would you extend the right to make an inspection to a man who had been a practical working miner, but had kept a shop for 25 years, because at some time in his life he had worked in a mine?—He would first want the confidence of the men.

31685. Would you give a man of that character the right to inspect if the men chose to appoint him?—I do not suppose that the men would choose to appoint him. We have never had a case of that kind.

31686. You wish to allow them, and let them appoint a man of that kind if they wished to?—We wish to appoint those who are or have been practical working miners. First of all they would require the confidence of the men to appoint them for that duty.

31687. Take the question of deputies' districts. As a general rule do you think that the districts are too large?—Yes.

31688. Is it possible to suggest a rule defining what the maximum size of the districts should be?—I should say to define it strictly in a rule would be difficult. It would be possible, I take it, for the inspector or the manager, acting along with someone, to define a reasonable amount for a man to inspect.

31689. You take it that it is impossible to make it a rule. Is it generally the case in Yorkshire that the districts are too large?—Yes, in my opinion.

31690. Can you give me any particular collieries where you think the districts are too large?—I am not prepared to do that.

31691. Is it possible to get them?—I am not prepared to give you them.

31692. Will you give them to the Secretary? Do you not think when you say that there are collieries where the districts are too large, and it is a source of danger, that it is due to those collieries that you should give the name, so that inquiry could be made to see what size the districts are, or whether there are more accidents there? Does it not occur to you that your evidence would be more useful if you could give names so that inquiries could be made as to the size of the districts?—Would not that rather be the work of the inspectors?

31693. Will you tell the inspectors that?—I take it as a matter of information the inspectors would be prepared to communicate with you.

31694. Would you give the inspector the names of collieries where you think the districts are too large; that will be quite satisfactory to us. Will you do that?—I am not prepared to take that responsibility.

31695. Will you bring it before your Association and ask them if they will communicate with the inspector the names of collieries where they think the districts are too large. Do it confidentially, so that the inspector may inquire about it and bring the information here if he finds it so. Will you do that?

(*Mr. Enoch Edwards.*) Are you not asking this man more than you should do?

(*Mr. Ratcliffe Ellis.*) No, I do not think so. He makes a statement.

(*Witness.*) May I submit a point in connection with that. You have already had the inspectors here. They have already made, I believe, pretty much the same statement. They were never asked to supply the names or the collieries where this state of things exists.

31696. You make a statement. The Commission has to inquire into any regulations that can be made to secure greater safety. You say in Yorkshire, which is a very important district, that generally the districts are too large, and that the firemen cannot do their work. I want to ask you if you will follow that up by communicating with the inspectors and giving them the names of the collieries where that state of things exists, so that they may inquire into it and communicate the information to the Commission?—In reply to that I say our inspector has already made the same statement to this Commission.

31697. Will you say that you prefer not to do it, or that you will do it?—I prefer to leave that with the inspectors.

31698. I want you to give the inspector the information?—He has already made the statement.

31699. May I take it that you prefer not to make that communication to the inspector?—The inspector has already made the statement to this Commission.

31700. That is as far as you will go?—Yes.

(*Chairman.*) Mr. Walker did say this at *Q.* 3978: He is asked "Generally do you think their districts are too large for them to fulfil their duties?"—(*A.*) "I think in many cases they are, and that they should be reduced so as to allow them to make two inspections during the shift."

(*Mr. Smillie.*) It was never put to him to name the collieries.

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(*Witness.*) He was not asked to name the collieries.

31701. (*Mr. Ratcliffe Ellis.*) You agree that it is important to maintain discipline?—Decidedly.

31702. You think that there should be no fines?—I do.

31703. I think you said that it should not be at the option of the manager to impose a fine; I understood you to say that?—Yes, I do say that.

31704. Are you under the impression that according to law a man can be made to pay a fine, whether he likes it or not, by the manager?—I am under the impression that under the law the men are given the option either of being fined or having proceedings taken against them.

31705. He can please himself whether he pays the fine or not?—There is no option, because he may be prosecuted.

31706. Or he may be discharged. A man can please himself whether he is fined or not. Do you not know that these fines are almost invariably inflicted at the request of the man? The man desires to be fined rather than be prosecuted?—I do not. Our men object to fining very strongly.

31707. They do not agree to be fined, although every time a fine is imposed upon them it is done by their own consent. It may be that they consent rather than be prosecuted or discharged, but although every fine that is inflicted can only be inflicted upon the men agreeing, still they say they prefer to have no fines?—You say they cannot be fined without agreeing to it.

31708. Yes.—They cannot be fined without agreeing to that or to some other punishment. That may be the position for the moment.

31709. Notwithstanding that they can accept the fine rather than the other punishment, they instruct you to say that they wish the fine to be abolished altogether, and the other punishment to be inflicted. Is that what they instruct you to say?—That is my position with reference to fining, but with reference to the option of the men in connection with fining I do not suppose that it exists to the extent you suppose it does. I had a case within my own experience not very long ago where a man was fined 5s. He was never asked whether he would be fined 5s., but he was fined 5s., and it was really on account of not doing sufficient work.

31710. Was it a case of a fine being unjustly inflicted? Did he report that to you as the miners' agent?—Yes, the case came within my personal knowledge.

31711. Did he report that to you as the miners' agent, that he had been fined 5s.?—He did not pay the fine. The fine was kept back. There is no paying; it is taken off.

31712. It was deducted. Did he report this to you as the miners' agent?—He complained about it.

31713. What did you do?—We got the man's money back.

31714. There was no great harm there, was there? When it was reported to you you got the money back?—Supposing that man had not taken the opportunity to report, the system of fining goes on without being generally known.

31715. That is your objection to fining?—There is a matter with reference to these fines. I take it in a case of prosecution not only the men would be braced up to keep the law, but it would have a certain effect on the manager. In prosecuting the men he would at all events be kept up to the mark himself, and I see a beneficial effect in that.

31716. You are entitled to give your view of it. Now with regard to the Special Rules, your suggestion is that before a Special Rule is proposed by the employer, if he wishes to propose a rule he should invite somebody, say the men at the pit, to talk it over with him?—Yes. In my opinion it would be conducive to the carrying out of the rule if the men were consulted when the rule was being drafted.

31717. Would you go so far as to say that if the men did not approve of the rule the employer should not be allowed to propose it?—No, I would not take the responsibility of saying that he should not be allowed to propose it, but I do think that a conference between the two parties would bring out both sides of the question and bring the men in touch with the rule.

31718. It would be useless in this case. If the employer proposed a rule he could do it whether the men liked it or not. You think it would prevent friction?—Yes.

31719. Supposing the employer wished to propose a rule, would it be likely to prevent or encourage friction if he was obliged to send for the men in the first instance to say what the proposed rule was, and whether the men like it or not he goes on proposing his rule. Would that be encouraging friction, or preventing friction, do you think?—In my opinion if he consulted the men it would prevent misunderstanding.

31720. Would it meet your views that the owner, having proposed a rule to the Home Office, it should be advertised, and the men should be entitled to object to it and be heard, and, if need be, go to arbitration before the rule is established?—That is the present position, is it not?

31721. Not quite. The inspector can object to it; the Home Office can object to it, but you should have an express position given to you to object to this rule. Any person interested might object to it, and before it is established you should be heard, and if need be the matter should go to arbitration?—In the first place I take it if the men were consulted it would prevent misunderstanding. After that, if the owner intended to carry out the Special Rule, the present law makes provision for objection. Is not that so?

31722. Yes. You say that no rule should be proposed without in the first instance the owner being compelled to invite—who must he invite, the men at the colliery—I do not quite gather—to discuss it with him. Whom do you say he must invite?—His workmen, I take it.

31723. He must invite his workmen to discuss it with him, and whatever they may say he can propose his rule. Do you think that would prevent friction?—Yes. We had a case in our Society where we had a considerable amount of trouble with reference to the enforcement of the Special Timbering Rules.

31724. I was going to ask you about that. Those rules were proposed by the Home Office?—I believe so.

31725. They did not invite the men to discuss them?—No.

31726. Where is the difficulty about the carrying out of the rule?—The difficulty was with reference to Clause B.

31727. What was that?—We had a difficulty with reference to the meaning of "working place."

31728. What is Clause B? Will you read it?—"Where the timbering of the working place is done by the workmen employed therein the miners shall have a sufficient supply of suitable timber such as is ordinarily used at or within 30 yards of every working place where mineral is being gotten, and the deputy shall see such supply is so kept there."

31729. That rule was proposed by the Home Office. You can answer that question?—Yes.

31730. When was the first you heard of it?—How long is it since those rules were proposed?

31731. After it was proposed by the Government did you hear of it before it was established?—I am not prepared to say that. I should take it that is a matter of seven or eight years ago.

31732. I want to see exactly what your objection is. You represent the miners in your particular district?—Yes.

31733. When was the first you heard of this rule after it was proposed? Did you hear of it before it was established, or your Society?—I am not prepared to say that. I take it no doubt our officials would hear about it, but I am not prepared to answer that question.

31734. Did not your officials meet the inspectors and the coal owners in Yorkshire when it came from the Home Office, and did they not have a full discussion upon it before it was established, at the Home Office. Was that not so?—I am not prepared to say that.

(*Mr. Enoch Edwards.*) He was not an official at the time.

31735. (*Mr. Ratcliffe Ellis.*) He says there was a difficulty in carrying out the Timbering Rules because the men were not consulted. I want to show that the men were consulted, at any rate the officials. The Home Office proposed these rules, they were commented upon by the inspectors, the men and the officials, and established, and then the men would not carry them out. That is what I understood you to say?—Who would not carry them out?

31736. You say that there was a difficulty in getting the men to carry them out.

(*Mr. Enoch Edwards.*) It was a matter of contract

(*Witness.*) I said there was a misunderstanding.

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31737. (*Mr. Ratcliffe Ellis.*) What was the difficulty in carrying out the Timbering Rules?—The first part of the question was with reference to what was meant by "working place," and the second part of the question was with reference to contract.

31738. That was after the rules were established?—That was after the rules were established.

31739. The men had some difficulty from that point. However, they did ultimately carry them out?—Yes.

31740. Or you made some arrangement.

(*Mr. Enoch Edwards.*) They got some stoppages.

(*Witness.*) We had a six weeks' strike.

31741. (*Mr. Ratcliffe Ellis.*) It has been suggested where a travelling road is not wide enough the men could travel in the return airway. Do you approve of that?—I approve of them travelling in the return airway before travelling in the haulage road.

31742. Rather than travel in the haulage road with machinery in motion, you think they had better go along the airway?—I prefer a separate travelling road independent of the return airway.

31743. You say "practicable," but when you say "practicable" I suppose you mean commercially practicable. You would not impose on a colliery the cost of making wider roadways if it would mean that the place could not be worked at a profit? You said "practicable" in your statement?—I was alluding there, of course, to the difficulties of mines that are already set out, and where the difficulty might be in an old mine which was practically coming to the end of its tether.

31744. When you say "practicable" you mean commercially practicable, and not physically practicable?—I would not agree to put commercially entirely in the scale. I would rather say physically practicable.

31745. If you mean commercially practicable, I do not know that I should disagree with you?—The thing I had in my mind with reference to "practicable" was this: there may be in old collieries just about to close extreme difficulties that make it pretty well impracticable, but to put it "commercially practicable" I am not prepared to agree with that.

31746. With reference to engine-winders' certificates, why do you want them to have certificates?—As a proof of their competency.

31747. In your experience do these accidents happen because the engine-winder is not competent, or because he is for the moment careless, that is to say, where there is any blame to the engine-winder at all?—The only thing that I have more particularly in my mind is this——

31748. Would you mind answering my question? Where the engine-winder is blamable, do the accidents happen because he is incompetent, or because he is for the moment careless?—I should say both.

31749. Will you give me a case where an accident happened from the incompetency of the engine-winder?—Would not carelessness prove incompetency?

31750. Certificates would not guarantee a careful man. Can you give me a case where an accident has happened from incompetency?—We generally take it an accident in that sense is a proof of incompetency. If a man is careless it is a proof he is incompetent.

31751. Do you agree that these accidents which happen where the engine-winder is blamable happen because he is careless and not because he does not know better?—I should say they happen from both sources.

31752. Will you give me a single case in which it happens through a man not being able to look after his engines?—We have many accidents occurring from time to time.

31753. Will you give me a single case in which a man did not understand his engine, or anything which could be ascertained by examination?—I could simply give it as a matter of opinion. In our district we have a large number of accidents and it would be advisable for the men to pass an examination to prove their competency, and if subject, as men may be, to sudden illness or carelessness that would be a thing that could not be avoided, but first of all they should be proved competent.

31754. You cannot guarantee carefulness by examination or certificate?—But you can prove ability.

31755. Can you give me a single instance where a winding accident has happened through want of ability on the part of the engine-winder?—Is not the accident proof of want of ability?

31756. You agree with me that carelessness, or rather carefulness, will not be secured by certificate, but that ability will. Will you give me a case where a winding accident has happened through want of ability on the part of the engine-winder?—I take it that where the accident occurs it is a proof of want of ability.

31757. Will you give me a single case?—We have cases occurring from time to time.

31758. If you cannot give it now will you supply the Commission with a case in which an accident has happened through want of ability on the part of an engine-winder?—I take it first of all——

31759. Will you see if you can find a case of that?—You get an engineman without a certificate. He winds for a certain length of time and then has an accident.

31760. Will you supply it to the Commission if you can find one? Will you look it up, and if you cannot supply it, of course you cannot, but if you can find where an accident has happened in consequence of want of ability on the part of the engine-winder, I should like to have it. You will find cases where it is carelessness or a man forgets for the moment, but I want a case where it is an accident caused from want of ability on the part of the engine-winder. Perhaps you will think about that if you are not prepared to answer that question now?—I take it that the accidents, so far as can be proved, are in many cases proof of want of ability.

31761. If you can find such a case will you let us have it?—There is no qualification at the present time. There is no certificate required.

31762. It is a question of whether it is wanted or not. If you can find a case in which it was caused by the want of ability, something which you would have ascertained by examination, and an accident happened from that, I should like to know of it?—I am able to point to a case, but I do not know that it is a case of direct accident. At Hemsworth Collieries there was a dispute with reference to firemen or something of that sort. Some of the enginemen, I believe, for the time being refused to wind, and the manager appointed men who, in the opinion of the men who were riding in the shaft, were not competent. Those men had been riding in that shaft and there was no complaint, but there was a change made in the enginemen, and these men bumped the men about in the shaft and caused considerable alarm.

31763. Was there an accident resulting from it?—I am not prepared to state at the present time that there was any serious accident.

31764. That was at the Hemsworth Colliery, in Yorkshire?—Yes.

31765. How long ago was that?—A few years back.

31766. That was a case in which there was a dispute, when the winders refused to wind, and the colliery was stopped, and the colliery owner, to keep the place going, got somebody else to wind and the men were alarmed, but there was no accident so far as you know. What was the end of the dispute?—We had considerable difficulty in keeping the men at work on account of the alarm which was occasioned.

31767. I will see if there is any accident at this place?—We are to assume the man is to kill men before we can prove incompetency.

31768. That is the only case you can give me?—That is the position. We have men who have ridden in that shaft for years, who are members of our Society. The change was made and they rode in the cage and found it bumped up and down, and that it was not safe, in their opinion, to ride in it.

31769. (*Mr. F. L. Davis.*) Supposing that man had a certificate, he might bump them just the same?—It would be a proof that the man was in the eyes of the examining authority a capable man. There was no option in this case.

31770. It would make the bumping more pleasant because he had a certificate?—Of course not. That is not the point.

31771. (*Mr. Ratcliffe Ellis.*) You think that there should be ambulance appliances in each fireman's district down below, so as to be available in case of accident?—Yes.

31772. And also that there should be an ambulance carriage to take the men to the hospital?—Yes.

31773. Is that not generally the case?—Generally, no doubt, but it is not in all cases. It is not compulsory.

31774. Never mind about it being compulsory. If the man does it you do not want to have a law to make him do it?—They do not all do it.

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31775. Are there many cases in which that is not so ?—There are cases.

31776. Are there many cases in Yorkshire ? You have generally large collieries there ?—They are not all large. They are large and small.

31777. At the larger collieries there is an ambulance ?—Generally speaking there is.

31778. Are there many of the smaller collieries where there is not an ambulance ?—Yes. In our opinion if it was put in the rule it would end the question. There are collieries where the men have subscribed to provide their own ambulance, and where that ambulance is in existence even at large collieries.

31779. You think they should not do that, but that the employers should do it ?—I do.

31780. With reference to lamps, would you be in favour if the lamps had been taken into a mine, of their being brought out of that mine supposing there had been no gas seen for 12 months, and work with naked lights again ?—I stated that in my evidence.

31781. Do you agree with that ?—Yes.

31782. Is there a disadvantage to the men in working with lamps ?—Yes. There is no doubt that it is a disadvantage in working.

31783. You rather favour their being brought out in the interests of the men, that they should come out if there is no gas found within 12 months ?—I take it it is in the interests of the men that lamps should go in where gas is found, but if it is proved that the colliery has no gas for 12 months I should not object to their coming out.

31784. Why should they come out ?—Because the danger is not there.

31785. If the lamps are already provided, and everybody has the lamps, and the management has found the lamps, why should they not go on using the lamps ?—You asked me if it is a disadvantage to some extent.

31786. It is in the interests of the men who are working to have more favourable conditions. You say that the lamps might come out if no gas was found for 12 months. It is to enable them to work under more favourable conditions. That is your object ?—My idea with reference to lamps is, first of all, that they should be in almost general use. I do not believe in the system of working a colliery until there is an explosion and then putting lamps in. After gas is found in a mine lamps should go into the mine and be kept so long as that gas remains. If there is adequate proof for a period of 12 months that there is no gas found within the mine, the conditions that prevailed prior to their going in might obtain again, but I am not prepared to say that I am disposed to favour their coming out.

31787. (*Mr. Smillie.*) The Yorkshire mines are what are called fiery mines. It is a fiery district ?—Yes.

31788. Some of the mines are of considerable depth, I think ?—Yes, over 600 yards.

31789. You have ventured the opinion that you personally, and the Association to which you belong, consider that the deputies' districts—the firemen's districts—are too large ?—Yes, I do.

31790. In your Special Rules the provision is that the examination must be made within three hours of the men starting work ?—That is so.

31791. In fiery mines do you think it is safe for the inspection of the places to be made three hours before the workmen go into their places ?—I do not.

31792. I suppose that a considerable accumulation of gas might take place in a period of three hours ?—Decidedly.

31793. In deep mines where there is a crush, the whole position of the working face might be altered within three hours ?—Yes.

31794. Do you think that the only reason that three hours was put into the Special Rules was with a view of giving the deputy three hours to cover his district ? If you have no idea on the matter you need not give an opinion, of course. The Scottish miners' Special Rules provide for two hours before the starting of the work ?—Yes.

31795. Durham provides two hours as the time prior to the workmen starting. South Wales for two and-a-half hours, but in Yorkshire it is three hours ?—Yes.

(*Mr. Ratcliffe Ellis.*) I think you will find it is two hours in Lancashire, too.

(*Mr. Smillie.*) I think the managers conflict in Lancashire.

(*Mr. Ratcliffe Ellis.*) Generally in practice it is two hours.

31796. (*Mr. Smillie.*) You think two hours is a safer period after which the workmen shall start work ?—Yes.

31797. There is no reason why it should be three hours other than that the extent of the district is so large that it takes three hours to make the inspection ?—That is the case.

31798. There is no other reason so far as you know ?—No ; that is my opinion.

31799. The fact that three hours is allowed might be reasonable proof that the districts were too large ?—Yes.

31800. Have you had personal experience of working with naked lights in the shape of candles ?—Yes.

31801. Are candles used in your naked light collieries in your county ?—Yes.

31802. Is the light from candles more suitable and more effective to allow workmen to discover dangers from the roof and sides ? Can they make a more thorough examination with a naked light than with a safety lamp ?—Yes, in my opinion, they can.

31803. Other things being equal, in a non-fiery mine where gas had not been discovered, naked lights would be more safe so far as falls from sides and roof are concerned ?—Yes, they would be more effective in that direction.

31804. You are aware that by far the largest number of deaths takes place from accidents from falls of roof and sides ?—Yes.

31805. A very considerable number of accidents take place from accidents on the haulage roads ?—Yes.

31806. Some of those may occur through insufficient light ?—Yes.

31807. Have you ever found any difficulty yourself in examining the nature of the roof and sides with your own safety lamp or close lamp ?—Yes, there is no doubt that it is not so well adapted at the present time to examination as a candle, so far as the roof is concerned.

31808. To some extent it may be guess work as to what the condition of the roof is ?—So far as the sight is concerned. You also take the sound.

31809. The sound might guide you ?—Yes.

31810. So far as seeing a fissure or a slit, there would be considerable difficulty in seeing that with a covered light ?—Yes, much larger difficulty than with a naked light.

31811. Is there very much shot-firing in Yorkshire in the coal ?—Yes, in certain mines there is a great amount of it.

31812. Are the shots usually fired at the present time by a battery ?—Yes, by battery in the fiery mines. Of course, in the shallow mines, naked-light mines, they do not use the battery.

31813. They fire with a fuse or squibs ?—Yes.

31814. In fiery mines do the workmen stem their own shots, or does the competent person appointed by the manager as shot-firer stem the shots ?—So far as my experience goes, the workmen usually stem the shot, but, of course, in speaking in that connection it would not extend to what you would term the extreme fiery mines.

31815. In the case which you now mention it is what are called permitted explosives or high explosives ?—Yes.

31816. Are the workmen who stem their own shots put in possession of the explosive and the detonator ?—Yes, so far as I know.

31817. Do you consider that a safe course ?—No.

31818. Do you think in fiery mines, where high explosives or permitted explosives are being used, that the shots should be stemmed and fired by a competent person appointed for that purpose ?—I do, decidedly.

31819. With regard to certificates for firemen, I suppose your present class of firemen in Yorkshire, the vast majority of them, are thoroughly competent men ?—I should not say they are not.

31820. There is no guarantee so far as the certificate is concerned at the present time that persons who are incompetent will not be appointed to that position through favour with the managers ?—No, there is no guarantee whatever.

31821. Have you known any cases in which persons were appointed to that position whom you felt and your Association felt were incompetent ?—Yes.

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31822. You have known of individual cases?—Yes, I have.

31823. The holding of a certificate of competency would at least prevent anything of that kind being done?—Yes.

31824. A fireman's is a very responsible position?—Very responsible.

31825. Do you consider as a practical miner with long experience that the safety of the workmen depends to a far greater extent on the ability or the competency of the fireman than it does on the general manager?—I do.

31826. Have you cases in which the fireman may have from 50 to 70 men under his charge?—Yes, more than that I should say.

31827. In some cases more than that?—Yes, more than that.

31828. It depends on his experience and competency as to whether the safety of those men will be properly looked after?—It does.

31829. The whole of those men?—Decidedly.

31830. Every morning the men go down the mine they place their lives unreservedly in the hands of the fireman who has made an examination of those places?—They do.

31831. Unless he is competent, a very serious accident, involving the lives of all the men employed in the pit, may occur?—That is so.

31832. Are you old enough to remember the conditions of the mines prior to the compulsory certificates for managers? Were you working in the mines prior to the passing of the Act in 1872?—No.

31833. Would you take it as a good argument against compulsory certificates for colliery managers that the staff of men employed prior to the passing of the Act were fairly good; supposing it had been proved that the experience of the men employed previous to the passing of that Act proved that they were capable men, would that be any reason why they should not hold certificates?—Not at all, in my opinion.

31834. You admit the necessity of colliery managers passing an examination and holding a certificate of competency?—Yes, decidedly.

31835. You think it is a very good thing?—I think it is a necessary thing.

31836. You only urge that the same thing should apply to other responsible officials under the Act?—Yes.

31837-8. That there should be an examination to prove their competency?—Yes, the men responsible for the management and government of the mine should pass an examination to prove their competency.

31839. Is it your opinion that the death and accident rates would be considerably greater were it not for inspection by Government inspectors?—Yes, I am of that opinion.

31840. Are you of opinion that additional inspection would lead to greater safety?—I am, and that is the reason why we are seeking it. We have no other object in view.

31841. Do you think there is any real inspection of mines going on at the present time?—So far as our district is concerned, I am of opinion that there is no practical inspection—that is what I should term surprise inspection. The work is almost exclusively confined to examining where accidents have occurred.

31842. Do you know personally of any thorough inspection by a Government inspector of any mine in Yorkshire?—I do not.

31843. In your whole experience as a working miner you have never known of a thorough inspection, that is, going in at one end of the mine, round the working places, by a Government inspector?—I have not—never.

31844. Is that what you mean by a thorough inspection really?—I take it that occasionally, at all events, a thorough inspection of every part of the mine should be made on behalf of the Government.

31845. Do you think that would interfere in any way with the management of the mine?—Not at all.

31846. Do you think it would take any responsibility off the present managers?—Not at all; I think it would to some extent increase it.

31847. Do you to any great extent take advantage of the rule which gives you the right to appoint two persons to make an examination on behalf of the workmen?—Not to a great extent.

31848. Have you known where it has been done it has led to improved conditions underground?—Yes.

31849. Notice must be given to the management of the appointment of persons under that rule?—Yes.

31850. Have you known whether preparations have been made from the time the notice was given up to the time the examination was made?—I think it is a customary thing almost.

31851. I want you to put it frankly. If there was a large increase in the staff of Government inspectors and the managers of collieries generally in Great Britain, do you believe that the staff would be sufficiently large to bring about surprise visits occasionally more often than they are at the present time. Would it lead to increased safety?—In my opinion it would, decidedly: there is no hesitation on my part in saying that.

31852. Do you know whether or not it is a common thing when it becomes known that an inspector is about to visit a colliery because of an accident, or because he has been requested to do so, that preparation is made for his coming there in the shape of additional timber, or brattice it may be, being sent down the mine?—Yes, that is the custom so far as I know it.

31853. Have you known that personally to take place in your experience?—Yes, I have.

31854. I want to ask you a question or two with regard to inquiries. At the present time the Coroner's Inquest is not at all satisfactory to the miners, because of the power vested in the hands of the coroner to refuse to allow a person to take part in the examination of the witnesses?—That is so.

31855. You have now, or have had, coroners in Yorkshire who refuse absolutely to allow any person on behalf of the workmen to put questions?—Yes.

31856. And would only permit questions to be put through him as coroner?—Yes.

31857. What you claim is not that every person employed at the colliery should be entitled to appoint a person to cross-examine on their behalf, but that the men or the organisation—the Society to which the workman who is killed belongs—should have the right as a Society to appoint a person to look after their interests?—That is what we ask.

31858. Under the inquiry which Mr. Edwards spoke about, the second inquiry which the Secretary of State has the right, if he cares, to order, do you claim that the workmen through one of their own accredited representatives should be entitled to take part?—Yes, I think that would be a necessary part of the inquiry from our point of view.

31859. Is it your opinion that sometimes men who have had many years experience of underground work are better fitted to bring out the real facts of the case than a person who has merely a theoretical knowledge, such as a skilled lawyer: I mean a person who has no practical mining knowledge?—My opinion is in favour of the man who has had practical experience.

31860. Have you ever known of any ambulance carriage for use underground for bringing injured persons to the pit bottom?—I have not, except the ordinary stretcher. That is not an ambulance carriage.

31861. The ordinary stretcher may be a very painful method of bringing a person, if he is seriously injured?—Very much so.

31862. You would be favourable not only to proper ambulance appliances being kept, but if such a thing was perfected as an ambulance carriage which might be run underground on the rails to bring an injured person or persons to the pit bottom, you would also be favourable to that?—I should say that is very desirable.

31863. Is it desirable also that the various districts of a mine underground should be in telephonic communication with the surface?—Yes.

31864. In order that as quickly as possible word of an accident should be sent to the surface?—Yes.

31865. Sometimes at present it takes a considerable time for information about an accident to reach the surface?—Yes, it does.

31866. I think with regard to the Special Rules, you said in answer to Mr. Ellis that in the event of the colliery owners initiating rules and sending them to the Home Office, your Society would be entitled to object to them when they were hung up for 14 days?—Yes.

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31867. Could your Society object to them ?—I do not suppose they could object: they could enter a protest.

31868. In what way ? Under the Act is it not only the workmen who are employed who could object ?—I may be wrong in that statement. I had an idea that we could object.

31869. If you were told that it is only the workmen employed who could object, that only any single workman could object, and that your Society could not object, would that not make a considerable difference ?—It would.

31870. Do you think that if Special Rules—I am dealing now especially with Special Rules with regard to the safety of underground labour and above-ground labour—were mutually adopted with a view to securing greater safety by consultations and joint meetings between the workmen and the employers—if rules were adopted in that way would they not be more likely to be carried out than rules adopted to a very great extent without consultation with the workmen ?—That is exactly my point in connection with the statement I have made. If there was a joint consultation it would lead to a better carrying out of the rule and more interest in the rule.

31871. It has been suggested that the coal masters, because they are responsible, should have the right to suggest Special Rules ?—Yes.

31872. Who do you think has the greatest responsibility, the men who risk their lives underground or the coal master who merely risks his capital in the concern ?—Decidedly the man who risks his life is the most concerned.

31873. And would have the best right to draw up rules for his own safety ?—Yes.

31874. At least, to have a voice in the drawing up of the rules ?—Yes, to have a voice in drawing them up.

31875. You think it is not unreasonable to ask that the workmen, through the representatives of their Society, should be consulted on a question of this kind ?—I think it is a matter of simple justice, if you care to put it in that way.

31876. (*Mr. F. L. Davis.*) Mr. Smillie asked you which you thought had the most responsibility, the man who works underground and risks his life, or the owner who risks his capital. I put it to you, does not the manager risk his life, too, under the Act ?—Not to the same extent as the workman: if he is in the mine he risks it to that extent.

31877. He is responsible for the safety of the whole of the men in his pit. If he does what is wrong he may lose his life as well. Is not his responsibility just as great ?—His responsibility with reference to life is not so great, because the man at work at the face is risking his life during the whole of his employment. The manager will risk his life when he is in the mine, and then only.

31878. If he does not do what he ought to do to carry out the conditions of the Coal Mines Regulation Act, is he not in a very serious position himself ?—Decidedly.

31879. It is not a question of the workmen on the one hand and capital on the other hand. The owner or the manager may be responsible, and may be in a very awkward position if he is found to have done what he ought not to have done. Is that not so at present ?—Yes, but this point was with reference to the drafting of Special Rules as I understood it.

31880. It does not matter whether it is with regard to the drafting of Special Rules or anything else. The manager is the man who is responsible if any lives are lost, and he has not done all that he ought to have done ?—With reference to the drafting of Special Rules, that is something that has to be suggested and drawn up, and the point was as to the responsibility with reference to that.

31881. You think if the workmen and the owners were to consult about any new Special Rule together it would tend to better observance of the rules and a better understanding of the rules by the men ?—I do.

31882. Do you think that there is a chance of the men objecting to a rule at any time which may be proposed by the owners in the interests of safety or for the better carrying out of the work of the mine ?—I do not suppose it is probable that the men will object to any Special Rule in the interests of safety or for the better working of the mine.

31883. You do not think so ?—I do not think so.

31884. Do you think that the men in your district would have agreed to the Timbering Rules, supposing they had been discussed by the men and the owners in the first instance, as they are at present—as they were proposed by the Home Office ?—We did not discuss the Rules at the time.

31885. Do you think that they would, supposing then what you suggest had taken place, that the men and the owners in that case had met together and discussed the thing—do you think then the men would have agreed to those rules ?—I think after the rules were in force they would have been carried out without any difficulty.

31886. I am asking about before they were in force. I am taking as my point the position you want to see obtain ?—The Special Rules for that purpose were put in force without our approval, we will put it in that way. We were not consulted about that so far as the men were concerned. If we had been consulted the position would have been created.

31887. I do not understand what you mean: what position would have been created ? It may be a matter of opinion, but I am asking you your opinion. Supposing the owners and you talked over that particular existing rule before it was established, do you think the men would have agreed to it then ?—I do.

31888. You do ?—I do.

31889. What was your objection afterwards ?—Because the difficulties with reference to misunderstanding on the contract question would have been discussed and an understanding arrived at.

31890. You say it would have been discussed and an arrangement would have been arrived at, but here is the rule existing at present. The men after it was established objected to it. Would they not have equally objected to it before it was established if there was a meeting between them and the owners ?—If there had been a meeting and the matter discussed—it had to be discussed ultimately, it was after approval, but if that had been done before that difficulty and trouble would have been avoided.

(*Chairman.*) Do you suggest the draft might have been put in a different form, and they might have had this discussion before ? Do you think the drafting of the rule would probably have been altered to make it clear as to what exactly it was going to be.

(*Mr. Ratcliffe Ellis.*) What would the alteration have been ?

31891. (*Chairman.*) You suggest that the rule was drafted in such a way that the men did not understand what they had or had not to do ?—There was a difference with reference to the term "working place" to begin with.

31892. (*Mr. Ratcliffe Ellis.*) The question was as to who should take the timber to the working place, whether the workman should or the management ?—There was a misunderstanding as to what was the working place within the meaning of the Special Rules.

31893 That was the question ?—That was one question.

31894. That was a question of wages ?—The first question was what was the meaning of "working place" within the meaning of the Special Rules. It said, "It shall be taken within 30 yards of a man's working place," and it was a question of what was a man's working place—is it the face or the bottom of the gate ?

31895. (*Chairman.*) It would have been clear if there was an understanding with the men before the rule was promulgated. You would have had a talk and made it clear what the management meant by the term "working place" ?—Yes.

(*Mr. Enoch Edwards.*) There is an explanation of that difficulty, but we cannot go into it here.

(*Mr. F. L. Davis.*) That was a question of wages, and I will not go into it.

(*Witness.*) One question was a question of wages, and another question was the question of definition.

31896. (*Mr. Smillie.*) The question of definition is a question of safety, because the supply of timber is one of the most important things. The workmen say "Under this rule we do not require to take it 50 yards from our face," and the employers say, "You must." The rule says 30 yards from your working place, and that is down to your gate-end. It may mean 50 yards from the working place ?—Or it may mean 100.

(*Mr. Ratcliffe Ellis.*) The substantial question was who should take it there.

(*Mr. Smillie.*) Take it where ?

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31897. (*Chairman.*) The contention seems to be that under these rules there was a difficulty in working which might have been avoided, either by a conference between the owners and the men or in some other way, and possibly that the conference might have resulted in the rule being varied in such a way that it would be impossible to put two interpretations upon it.

(*Mr. Ratcliffe Ellis.*) There was that conference in Yorkshire if I am not mistaken. There was in most of the counties, and I think there was in Yorkshire.

31898. (*Mr. Cunynghame.*) I want to understand the improvement you suggest. That was a rule proposed by the Home Office?—Yes.

31899. How could the Home Office have consulted the men before proposing the rule? What procedure would you have us carry out? What would you have us do? It came into our mind that it was a good thing to have some form of systematic timbering, and we wanted to carry that out. What would you have us do?—My suggestion with reference to that is that the men should be consulted. It could have been sent down to our Society asking them to put it before their respective lodges and ask for suggestions.

31900. Before we proposed it to the owners?—You might take it from both sides at the same time.

31901. Before we could send it to you we must draw it up?—Yes.

31902. As a fact it was drawn up. It was proposed to the owners and also copies were sent to the inspectors with instructions to send it round and let it be known to the representatives of the men. Was that not so?—I was not an official at the time, and I am not prepared to answer that question.

31903. We will not deal with that particular case. In general, all the Home Office can do, as soon as they have drawn up what they imagine to be a good outline of a rule, is to let it be thoroughly known to the owners and men? That is all you could desire?—Yes.

31904. Take the Electricity Rules that were brought into force the other day. Are you aware that rules have been brought into force with regard to electricity in mines?—I have not seen those up to the present.

31905. I will tell you, because I should like to have your opinion as it has been referred to. Do you know how those rules were first designed and drawn up and arranged?—No, I do not.

31906. Then I will tell you. A Committee sat for a whole year and examined every witness they could get hold of—engineers, owners and men—and ultimately it resulted in recommending a set of rules which they appended to their report to the Secretary of State. That was published as a Parliamentary Paper, and issued to Parliament. The next step that was taken was to send a copy of those rules to the owners privately asking them what they thought of them, and at the same time a copy of those rules was sent to the Miners' Federation of Great Britain, as Mr. Edwards will know, and various unions, and made available in every way possible. Ultimately the rules were promulgated by the Secretary of State as required by the Act, and no objections having been raised, they passed into law and became rules. Can you suggest any improvement on that procedure, and, if so, what is it?—Suppose we deal with the question of these rules, which I am more familiar with than the question of the Electricity Rules. It may affect every man in a coal mine.

31907. You would be more likely to know about the timbering?—Yes, electricity will only affect a certain proportion of the men.

31908. Supposing these rules, instead of being Electricity Rules, had been about timbering, what else do you suggest the Home Office could have done other than it did with regard to those rules, namely, to draw up the best set of rules they could make after the fullest inquiry they could have, and submit them to the owners and men for the favour of their opinion?

(*Mr. Enoch Edwards.*) That was not done with the Timbering Rules.

(*Witness.*) With reference to these Timbering Rules, if they had been put before——

31909. (*Mr. Cunynghame.*) Supposing those Electricity Rules had been with regard to timbering instead of with regard to electricity, can you suggest anything that could have been done by the Home Office, and if so, what is it?—First drawn up *and* then submitted to the owners and men for their opinion. If that had been done, I do not suppose we should have any objection.

31910. There is nothing you could suggest?—No.

31911. If that was done with regard to the late Electricity Rules, that would afford a procedure you approve of, or at least upon which you cannot suggest an improvement?—That is speaking of rules put forward from the Home Office?

31912. Yes?—I understand that a manager can suggest a Special Rule.

31913. You are aware that the Timbering Rules were not suggested by the managers; they were suggested by the Home Office?—I suggest if it had been submitted to the men and a conference called, it would have removed the difficulty.

31914. At what period could the Home Office have consulted the men? They could not consult them before putting the rules upon paper?—No.

31915. They must put them on paper before they consult the men?—Yes.

31916. If, after putting them on paper, they consulted the men, what more could you want?—Did they send them to our officials and the Federation and ask them to call meetings and discuss the matter?

31917-8. I will read this letter. This was written on the 7th January, 1903: "Sir,—I am directed by the Secretary of State to transmit to you herewith a notice of proposal under Section 54 of the Coal Mines Act, 1887, of new Special Rules and amendments of existing Special Rules in regard to timbering and other matters. The Timbering Rules are based upon a model code which has been agreed upon between the Secretary of State and the Mining Association of Great Britain, and the rules generally, in the form now proposed to you, have been settled at a conference between Mr. Hall, H.M. Inspector of Mines, the North Wales Coal Owners' Association, and the representatives of the miners. If you do not object in writing to the rules within twenty days after the receipt of the rules by you, the rules will become established at your mine." That was directed to the owner. This letter stated that these rules were settled at a conference between Mr. Hall, the Inspector of Mines, the North Wales Coal Owners' Association, and the representatives of the miners. If this letter is true—assume for the moment that letter correctly states what had taken place—that would satisfy you?—The representatives of the men had agreed to it apparently.

31919. If it had been settled in that way, would that be enough for you?—Decidedly.

31920. If that is true in regard to this district, and this is a circular letter sent to all the miners, that would content you?—Yes.

31921. (*Mr. Ratcliffe Ellis.*) After all that in Yorkshire there was a difficulty about carrying it out?—That did not apply to Yorkshire.

31922. (*Mr. F. L. Davis.*) With regard to the third class of inspector that you suggest, I do not quite know what is in your mind. Do you suggest that that third-class inspector might in time become a second-class inspector and then a chief inspector?—If he qualified for the work entirely.

31923. At the present time, as I understand it, any sub-inspector may in time become a chief inspector?—Under the present system, I suppose.

31924. Under your proposal of three classes of inspectors, would you suggest that this class should be a separate class and should not be eligible for an assistant inspectorship or a chief inspectorship?—No.

31925. How would you do it? because so far as I understand you, the qualification would be a second-class certificate or some examination similar to a second-class certificate?—I do not see that any limit should be put upon the man's possibility in any way. At present, if he is in any mode of life, he has the opportunity of qualifying for any position he shows himself to be able to qualify for, and I do not see why any restriction should be put there.

31926. (*Chairman.*) He would have to go through the examinations for a chief inspector before he could become one?—Yes.

31927. (*Mr. F. L. Davis.*) If he has served the time, you would give him an opportunity of passing an examination which would put him up a grade to the grade of the assistant inspector, and after that to the chief inspectorship?—I see no reason why the man should be restricted. I would

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let him go as far as his abilities will allow him to go. The question as to how he would be moved up would be for the Home Office to arrange in accordance with the examination they devised.

31928. This third class is new to us, and I want to see what you mean?—They would not appoint him in the first instance unless he was fit for the work.

31929. That is the difference between your suggestion and the present state of affairs; at the present time they are all qualified, but you are suggesting starting a class which is not as qualified as the other two; that is why I asked you whether you intended these men to remain in the particular third grade or not?—Are they all qualified for chief inspectors?

31930. Yes.

(*Mr. Ratcliffe Ellis.*) There is no such thing as a chief inspector and an assistant inspector in qualification?

(*Witness.*) You have chief inspectors and assistant inspectors.

31931. (*Mr. F. L. Davis.*) They are equally qualified?—In some directions, of course, naturally. A chief inspector will be expected to know more than an assistant inspector.

31932. One man has had 10 years' experience and another man has only had two years' experience. You naturally would not put him to be a chief inspector with two years' experience, even if his qualification is the same?—His experience qualifies him for the position of chief inspector over and above examination.

31933. Your men would not be so well qualified as the present inspectors, to start with.

(*Mr. Enoch Edwards.*) He could not prevent him qualifying in time, he says.

(*Witness.*) I do not admit for the purpose of inspection that he would be less qualified. He might be in some of what I should term the theoretical work.

31934. (*Mr. F. L. Davis.*) From what class would you draw these third-class inspectors to start with?—From the miners. They recruit very largely the under-managers and the deputies from the miners at the present time.

31935. So that any man who took a second-class certificate, or passed an examination equivalent to it, whatever it is determined to be, would be eligible for the post of a third-class inspector?—A second-class examination?

31936. Yes.—I did not suggest that. I suggested that the Home Office should propose the examination which these men should qualify under.

31937. First of all you said a second-class certificate, or some similar examination you thought sufficient, whatever the Home Office decides that any man should pass; if he passes that he would be eligible for it?—We have workmen working at the face with first-class certificates. So far as I am concerned I should not object to them. They would qualify first, and it would then rest with the Home Office to choose the best men.

31938. Whatever this examination is settled to be by the Home Office, any man who passes that would be eligible for this post of third-class inspector?—Provided he had experience as a practical miner.

31939. In answer to Mr. Smillie you made a rather sweeping statement that when the inspector is known to be coming to examine a place where an accident has occurred, that there are preparations made for his visit. He suggested brattice-cloths were sent down, and other things. You stated that is a general rule in your district. I think that your answer was something like that. Where is it the custom? How do you mean to say it is general by the rule that these preparations are made when it is known an inspector is coming?—It is a matter of common knowledge throughout the county so far as the men are concerned.

31940. If it is a matter of common knowledge, will you tell us some place where it has occurred?—I do not know any place where it has not occurred.

31941. You do not know of any place where it does not occur?—No, I do not.

31942. It is one thing to tell us that it is general knowledge, and it is another thing to give us an instance. Will you give us an instance?—There are so many of them. I quote Yorkshire as a whole; so far as my experience goes I do not know an instance where it does not occur.

31943-4. Will you give me ani nstance in Yorkshire where it is done. You say this is done at every colliery, or rather, you do not know a colliery where it is not done? It must be a very simple thing to give an instance. Will you give us a case where you can tell us that before the inspector came these preparations were made?—It is so simple I am not prepared to take that step. I say it is generally done, and it is a matter of common knowledge among our men. In fact, I do not know of a colliery there that does not do it; but I am not prepared to quote any colliery. I put them all in one, because so far as this is concerned when an inspector is coming preparation is made.

31945. (*Mr. F. L. Davis.*) That does not impress me much if you cannot tell me cases where these preparations were made. Do you tell me it is done in every colliery?—What do you want me to do—to name this colliery and that colliery?

31946. Yes, and tell us what preparations were made on a particular occasion?—Preparations were made to put the place, so far as the inspector is likely to travel, in a thorough state of repair and condition so far as the Coal Mines Regulation Act is concerned, so that what he sees will be as it should be.

31947. The inference from that is in all the collieries in Yorkshire the places are not as they should be?—You can take it that way.

31948. When they know the inspector is coming, then they put it right. That is the only inference I can draw from what you say?—Draw what inference you choose. I make that statement, and I believe it to be true.

31949. With reference to inspection under Rule 38 by the men, you have told us that you want an alteration in the rule allowing men who are now practical working miners, or who have been, to make the inspection. I am not sure whether you said that you wished the rule to apply to men from other collieries; that a man should be appointed to make workmen's inspections under that rule not in the particular colliery in which he worked, but a man from another colliery should be appointed?—I see no objection to it being made so that a man from another colliery should be appointed; in fact, we render it at the present time that a man from another colliery can.

31950. There is some doubt as to the reading in some places. You would like to see that?—I should like to see the clause "who is or has been a practical working miner."

31951. Supposing you have men from other districts coming to examine a certain colliery, do you think that they should be put under certain restrictions as to keeping the information to themselves, in fairness to the colliery manager and the colliery owners?—What information?

31952. You get an outsider, not one of a particular owner's workmen, but somebody quite outside his own property, to inspect his property. The man might make use of any information he may get to the detriment of the manager or the owner. Do you think he ought to be under the same restriction as the mines inspector is at the present time?—Not with reference to making no statements about the mine that are likely to be detrimental, but I suppose you mean, with regard to the area of the workings and the class of workings, apart from mines inspection. Is that the point?

31953. Yes, a man gets information he otherwise would not get. It may apply to conditions of working, wages, and all sorts of things outside the inspection?—Apart from the question of inspection and the question of danger, I see no objection to the man being restricted, that is, with reference to any information outside the report. He ought at all events to be in a position to make a fair report as to the state of the mine.

31954. (*Mr. Enoch Edwards.*) His report may be to the detriment of the manager?—Yes.

31955. (*Mr. F. L. Davis.*) Do you not think it is only fair that an outsider who examines a colliery should do it under the same restrictions as a mines inspector at the present time?—I think that his work should be confined to attention to the question of the safety of the men, and up to that point he should be privileged to make a report. Over and above that, and with reference to other matters, for instance we will say as to what direction the workings are going, or anything else, he should be under restrictions just as the mines inspector.

31956. I am not suggesting any kind of restrictions, or any unfair restrictions, but something similar to the mines inspector?—I have no objection to that.

31957. I did not understand one thing in connection with fines. You are against the system of fining altogether?—Yes.

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31958. You said that where fining is in operation it tends to make discipline slack?—In my opinion it does.

31959. Because if it is known that fines are inflicted a man will not be so careful. If he is not going to be prosecuted but is going to be fined, he possibly is more careless. I do not understand that; when we had here the statistics, they shewed that the prosecutions in your district were very heavy?—Yes; the discipline may be good.

31960. Fines do not take the place of prosecutions altogether?—In our district, so far as we possibly can, we fight the fines. We never encourage our men to accept the fine, and that may account for the increase of prosecution. As a Society we set our face against it.

31961. In your district do you say fining is done very little?—I do not say so, but you say we have a lot of prosecutions. It is possible we get more prosecutions because we set our faces in such a determined manner against fining.

31962. I understood you to say where fining is in operation you do not get nearly so many prosecutions. That is what you did say earlier in the day. After that we found out in your district there were a very large number of prosecutions, so that your statement did not seem to be consistent?—I do not see anything inconsistent in it.

31963. You objected to fines because, when men knew they were fined instead of being prosecuted, it made them more careless, and if they did anything wrong they knew they were not going to be prosecuted but were going to be fined. and they did not mind?—You are putting something I did not exactly state. In my opinion, we oppose fining, and we believe if a man commits an offence against the Coal Mines Regulation Act he should be treated as the management is treated by the inspector; he should be reprimanded, and if a reprimand is not sufficient he should be prosecuted. We hold that the Act applies equally to the manager as well as to the men, and that there should be no middle course as to fining. If a man is fined he may accept the fine and nothing is known, and if another man is fined he may accept the fine and nothing is known, and so the system goes on, but if a man is prosecuted the case is known, and it has, in our opinion, a better deterring effect than fining. Not only that, but the very fact that the owner has to prosecute a man for not having sufficient timber set, or for not spragging, is bound to make him keep timber and spraggs sufficient for proper working. It is bound to have a better effect than fining.

31964. I do not think I disagree with that. There are many cases where a man prefers to be fined rather than being prosecuted?—There may be cases.

31965. I daresay you will agree if the management prosecute in every case they would be taking their officials away from the colliery, the people who are responsible for the safety of the mine, and constantly taking them down to the Court?—I do not think so.

31966. It surely is so in Yorkshire. Where there is a prosecution you have to take your fireman, and the undermanager or the manager, in order to go to the Court to give evidence?—Yes.

31967. If you are constantly doing that you will often take the men responsible for the safety of the miners away from their duties?—We are not seeking to be constantly doing that. Our opinion is that the system will tend to better observance of the Coal Mines Regulation Act, and that there will not be the necessity for prosecution.

31968. You think that there will not be so many breaches?—I think so.

31969. You said that a stricter supervision of the gates and roadways by the deputy is desirable. Do you not think something more might be done by the men themselves to obviate accidents?—Do you suggest that the men should take the responsibility of the deputies.

31970. They are responsible for the safety of their own places?—Yes.

31971. Do you not think something more might be done by them when there is no deputy there or no deputy could be there. Do you not think that the men might be more careful than they are at the present time?—I do not see that that affects the position of the gates. The gates are largely under the control of the deputy.

31972. Accidents happen to men, a good many of them, I put it to you, from their own carelessness. You are rather suggesting if the deputies did more that there would be fewer accidents. I am suggesting that if the men took more care themselves, that there would be less accidents?—Shall we suggest it from both sides.

31973. I am trying to suggest the other side, but you only put one side?—A man in the working place has as much at stake as anyone, and I submit that our men on the whole take every reasonable precaution so far as the working faces are concerned.

31974. Do you do anything, or your Federation, in your district to draw the attention of the men to the necessity of carefulness?—We always encourage our men to obey the rules with reference to spragging and timbering, and to keep themselves safe.

31975. Do you in public meetings or by lectures take an interest in the work—we have heard that in one or two districts they try to rouse the men to the necessity of being very careful of their own lives?—I do not know that we have done anything in the way of lectures at all for that purpose, but wherever our officials go and address a body of men they encourage them to go in for safety to life and limb, and to be obedient to the rules.

31976. On the question of haulage on the roads, there are three short clauses here in the South Wales Special Rules. I should like to read them to you and see if these will carry out what you said you would like to see: "The following rules apply to every roadman:—156. He shall carefully remove all obstructions from the roads in his charge, so as to maintain them constantly in a safe state for travelling therein. 157. He must give the fireman of the district immediate notice of any fall, or loose overhanging stones, or broken timber, or any squeeze or danger in the top or sides of any roadway or airway, or any other defect or danger which may come to his knowledge. 158. He shall daily remove all rubbish, and clean out and keep clear every incline-plane and every travelling road or heading, and every manhole in the district in his charge." I gather from what you said, those rules would, if adopted in your district, cover what you would like to see done?—This applies, so far as I see, simply to the cleaning of the rubbish. Two of those rules, at all events, 156 and 158, are confined to removing obstruction and keeping clear the travelling roads. Of course that would be desirable, but that does not affect the question of the manholes.

31977. Yes, "and every manhole in the district in his charge"?—It does not affect the question of the increased number of manholes.

31978. My point was the keeping clear of the travelling roads?—Simply the keeping clear of the travelling roads.

31979. The sides?—Yes, I think that would do.

31980. You said you thought that there ought to be some further rule with regard to that. Mr Ellis told you in Lancashire that they have a rule very similar to the South Wales Rules.

(*Mr. Ratcliffe Ellis.*) No, it is Scotland.

(*Witness.*) I think that, with reference to the question of obstruction, would meet it.

31981. (*Mr. F. L. Davis.*) With regard to safety lamps you suggest wherever gas has been found that safety lamps should be compulsory?—Yes.

31982. Do you know that the men themselves object very strongly to the putting in of safety lamps in many places?—If it was a question of equal safety the men, no doubt, would prefer to work with naked lights, but I do not suppose where the men know there is gas that they would object to working with lamps. It is a question of danger and degree.

31983. Do you not know many cases where the management are anxious to put in safety lamps where the men prefer naked lights. That would not necessarily be a fiery mine?—I know of no cases in my experience where the men, where there is gas in the colliery, have objected to taking in lamps. We know it is a question to some extent of arrangement, as far as wages are concerned. The men are naturally working, as Mr. Smillie has explained at a certain disadvantage, and it becomes a question of pay. There may be a difficulty in that direction but where it is a question of safety and where gas has been found our men generally are prepared to take in the lamp. The only point is in taking in the lamp they hold that it is detrimental to their working and their earning power, and that they should have a consideration in the tonnage rate.

31984. On this point Mr. Smillie asked you, in reference to naked lights against safety lamps, when a man is

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examining a place is it only by sight that he examines ?—No, he examines by sound.

31985. I was going to put that to you. When he examines he tests practically as much by sound as he does by sight ?—Both combined.

31986. He does both always ?—Yes.

31987. (*Mr. Smillie.*) Can he examine by sound where there are conveyors working at machine walls ?—Not very well, in fact I should say where a conveyor is working he is deprived of the privilege of testing by sound. *Mr J. Guest.* 4 Dec. 1907.

31988-90. (*Mr. F. L. Davis.*) You mean a conveyor in the face after a cutting machine.

(*Mr. Smillie.*) Yes, the noise is deafening.

(*Witness.*) On that point as to conveyors, the noise deprives him of one of his best assets so far as safety is concerned.

Mr. HERBERT SMITH, called and examined.

31991. (*Mr. Enoch Edwards.*) You are here to represent the Yorkshire Miners' Association ?—I am. *Mr. H. Smith*

31992. You are now the president of that body ?—Yes.

31993. It has a membership of some 70,000 or 80,000 ?—Yes.

31994. What is the view of Yorkshire on the question of Government inspectors: have you any complaint to make about the present Government inspectors ?—Not directly, but what we say is that they cannot cope with the work.

31995. There are not sufficient of them ?—No.

31996. You have no complaint with the work they do ?—No.

31997. You have three in Yorkshire ?—Yes.

31998. A chief inspector and two assistants ?—Yes.

31999. What do you think would be a fair number of inspectors for a County like Yorkshire ?—I think we ought to have at least another seven inspectors in Yorkshire.

32001. What distance from the mines do most of the inspectors live ? They do not all live in one centre ?—No: I should say they live on an average six miles from the nearest mine, and from the furthest mine, 46.

32002. In travelling from their home to that mine, in case of an accident, or for an inspection, a good deal of time would be taken up in coming and going back home again ?—Yes, it is.

32003. Have you given much thought to the question of another type of inspector, a practical working-man inspector ?—Yes.

32004. What is the view of Yorkshiremen on that question ?—Our general view is that these men ought to be qualified with five years' practical experience at the coal face to pass an examination similar to a first-class manager, because we realise that if he is not up to a first-class manager's standard he may be looked upon lightly by the manager, who would say he is somewhat his superior.

32005-6. In your judgment, while he has practical experience as a pitman, he should have sufficient technical knowledge to enable him to understand questions on an equal with the manager ?—I think those are three things required in an inspector—practical experience, theoretical experience and backbone when he has got that experience.

32007. Is there much inspection done by workmen under the present rule in Yorkshire ?—I should say, roughly speaking, about 30 per cent. of the mines take advantage of Rule 38; more would do so, but there are certain reasons why they do not.

32008. That 30 per cent. of inspection by workmen, year in and year out, would apply to the same collieries ?—Yes, largely.

32009. You have some collieries where they do not put this rule in force at all ?—Yes, for certain reasons.

32010. Where the inspection is done by workmen under Rule 38 it is done generally with the consent and approval of the colliery managers and people ?—Yes, largely.

32011. At any time, if there are wild rumours about the safety of a pit it is open to the men to appoint inspectors to go round and examine themselves ?—It is only that the managers insist upon a certain notice being given to them. We object to that notice. Certain work is done so as to take away somewhat the benefits of the inspection.

32012. Usually the under-manager accompanies these men round the pit ?—Generally the manager or under-manager.

32013. Do they manifest any unwillingness to go into certain parts of the pit or do they show all that is to be seen ?—My general experience is that they have given me privilege to go where I like, but the experience we get from other people is that they want to dictate what part they shall go into on a particular day.

32014. Have you yourself made these inspections as a workman ?—I did until 1904, when they took proceedings against me to stop me doing it any more.

32015. In 1904 you were appointed to make an examination of the pit you worked at ?—For 10 years prior to that I had been inspecting under Rule 38, but in 1904 I was appointed to make an inspection at the very pit I was checkweighing at.

32016. It was the colliery you were employed at ?—Yes, as a check-weighman.

32017. Did they object to your making an examination ?—Yes, and they took proceedings to prevent me from doing so.

32018. They objected because you were not employed in the pit ?—They put in that phrase "a practical working miner." They admitted the practical side and the mining side, but they said I had no working side at present, being a check-weighman.

32019. For 10 years you had made an examination of the collieries, but after you were appointed check-weighman they refused you ?—For nine years during my life as a check-weighman I examined that pit, and in the tenth year they objected to my doing it any more.

32020-1. Was their objection successful ?—Yes, the magistrates decided that I was not a practical working miner at that particular time under Rule 38; although I had done 23 years at the pit bottom prior to that and 14 years at the coal face.

32022. (*Mr. Enoch Edwards.*) That will explain why Yorkshire is anxious to include check-weighmen or that the check-weighman should not be excluded from examining ?—That is so.

32023. (*Chairman.*) Do you know whether there was any reason for suddenly taking this objection after allowing you to go down for nine years ?—I can give an explanation, but I do not know whether the other side will agree to that. I was appointed two months before to examine Hemsworth FitzWilliam Collieries, and we charged the manager with a breach of two rules, one was not providing sufficient manholes, and the other allowing horses to rub against roof, and not remedying it.

32024. You gave a bad report of that particular mine, and you think that report may have had something to do with raising the objection as to your not having qualified. That is your suggestion at all events ?—It proves I gave a too truthful report.

32025. That is what I say. You gave a report which was not favourable to the mine, and you think the reason why the managers turned round and did not allow you to examine any more was because you gave a truthful report, what they call a bad report, of the particular mine ?—Yes, arising out of that case. I also gave evidence against two men for breach of rules at the same time as I charged the manager.

32026. (*Mr. Smillie.*) Two of your own members ?—Yes, two of my own members, men who were paying my wages.

32027. (*Chairman.*) You think you not only got into bad odour with the masters but with the men ?—No, the men took no objection; they wanted a faithful report.

32028. Then why do you mention the men at all in connection with not being allowed to go on. The facts were that you had been as a check-weigher employed at least nine years in making the men's inspection, and no objection had been raised that you should be acting in

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that capacity during those nine years, and at the end of that time you made a report which you considered truthful, and this report was not favourable to the managers, and after that they took objection to your being an inspector and did not allow you to go on under Rule 38.

(*Mr. Smillie.*) A different mine under a different company.

(*Witness.*) I should like to submit to you that the offence was proved because the manager was convicted.

32029. (*Chairman.*) I am only on the question why they should suddenly raise this objection. Mr. Smillie says it is a different mine?—It was not a different mine where I was objected to. I was employed as check-weighman at Glass Houghton, and I spent 30 per cent. of my time working under Rule 38 inspecting mines in Yorkshire.

32030. Could there have been any reason other than your giving this unsatisfactory report of the mine? I thought Mr. Smillie said another reason might be you were employed under a different set of mine managers, who might raise the objection without knowing anything about your report. It seems objection was taken by a different set of men. Is that so or not?—No. The manager I inspected under was John Parkin. It was Mr. John Parkin under whom I was stopped.

32031. The same people stopped you after you had made this report who had always allowed you to be employed by the men under Rule 38?—Yes.

(*Mr. Smillie.*) The mine at which he gave an adverse report was a different mine from which he was employed at as a check-weighman. At Glass Houghton he had been check-weighman for nine years, and he had examined for nine years. At the end of that time he was appointed by the workmen to examine another mine at Hemsworth, and this is the examination in which an adverse report was made, and the manager at Glass Houghton, John Parkin, refused to allow him to make any further examination under Rule 38.

32032. (*Chairman.*) I will ask you what the circumstances were. Is this the state of the circumstances: after having acted in this capacity for nine years at this particular mine, you went to another mine and made an unfavourable report as to that mine, and when you went back to your old mine the objection was first taken by the officials of your old mine that you were a check-weighman and, consequently, not eligible for the appointment?—Yes.

32033. (*Mr. Enoch Edwards.*) It has cleared the point up to everybody's satisfaction, that for a number of years as checkweighman you acted as inspector for the workmen and all went well until you went to the pit of another firm. In your mind you were precluded from inspecting at your own colliery, because of what had taken place at the other colliery?—Yes.

32034. There was nothing else which happened at your own pit?—Except we got convictions there, but I am under the impression that this was an arranged thing with the coal owners, that I should be prevented from making inspections.

32035. You did come under that class?—Yes.

32036. For that reason your Yorkshire people think in any new Bill or in any recommendation of this Commission that checkweighers should not be debarred?—Yes. We think we stand in rather a more independent position than the workmen who work in the particular pit?

32037. You think the checkweighman would be less liable to be interfered with by the management if he is called upon to report any proceedings which may be looked upon as unfavourable to the company?—Yes.

32038. I have no doubt that what you did report was a true state of things as to what you found?—And to prove it the people were convicted by the Court.

32039. In regard to inspection by officials under Rule 4, what officials of the colliery do you mean?—I mean deputies particularly, more than anybody else, and shot-firers.

32040. A person whose duty it is to examine the working place?—Yes.

32041. Do you include firemen in that definition?—Not largely. In some pits they do in Yorkshire. He carries a joint position as deputy and shot-firer.

23042. Is it the deputy's business to examine the working place?—Yes.

32043. And the workings too?—Yes.

32044. It is his duty to examine the pit before the men go in in the morning?—Yes.

32045. In your experience what is the position of these deputies? Are the districts of such a size and area that the men can examine thoroughly within the meaning of the Act?—My opinion is the districts are too big, and that they have too many other duties to call them away, so that they cannot devote the time they ought to it.

32046. This deputy who performs the duty acts as a fireman?—Not in all instances.

(*Mr. Smillie.*) As a shot-firer, do you mean?

32047. (*Mr. Enoch Edwards.*) The point is a deputy as against a manager or an under-manager. I want to get at what you mean by a deputy. We will take the person who examines in the morning. Will he be a deputy or a fireman?—He is a deputy.

32048. He is supposed to make an examination within the area before the men go to work?—Yes, within three hours.

32049. This examination means an examination of roof, sides and travelling roads, and working places?—It should do, but what I find they do generally is to first inspect the ordinary roads, the main gates and haulage roads, and devote the latter three hours solely to the working places, running across faces.

32050. They are examining to see if the ventilation is all right, and if the place is free from gas?—Yes.

32051. Do they examine to see whether the faces are timbered correctly?—Yes.

32052. From your experience you think that the districts are too large to be properly examined and inspected?—Yes, I do.

32053. That is what you mean by "deputy or fireman in the discharge of his duties." If he is a fireman what other duties has he beyond examining the roadways and roof and sides in the working places, and seeing to ventilation?—The deputy, do you mean?

32054. Yes, the deputy?—He is expected to give a report as to why they have not got more coal out. He is expected to look after the trams and help them on to the road if they are off.

32055. When superintending the output of the coal he is not examining?—Yes, he is doing it between. He runs to a gate, examines that, and then comes back to the pass-byes to see that all is going on right, and so on.

32056. In all cases it should be somebody else's business to see that the coal was being sent out?—Certainly it should.

32057. You think that the fireman or deputy whose duty it is to see to the safety of the pit should have his duty entirely confined to safety?—In that district. He should not have to spend so much time in looking after other things.

32058. What is your experience with regard to falls from roof and sides? Is it caused because the timber is set badly? Do the workmen set their own timber at the face?—Largely they do.

32059. That will be their contract?—That is in the contract largely, except in some instances where they are paid separately for timbering. I want to deal with gate roads.

32060. Is that under the collier?—No, that is under the deputy.

32061. The collier is not responsible for the keeping of the timbering of them?—No, only for the working place, up to the edge of his ripping. These places are simply ripped, and in many instances they say, "This is safe, and it needs no bar." My experience has been that you cannot make it too safe. I say if it is safe, keep it safe rather than let it get worse. They allow these roads to break down and gutter, and there are continual falls, but they do not re-timber; they let it stop as it is for a day or two.

32062. Is the nature of the roof such that if first timbered they can constantly keep the roof up?—No, but you would have more notice of anything taking place, and then it would be a question of re-timbering again. I think there ought to be a system of timbering in a gate road, as in a bank.

32063. Do many accidents occur in the gate roads?—A fair number do occur on gate roads.

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32064. In your judgment many of them would be obviated if they timbered more quickly ?—Yes, and more systematically.

32065. What about the working face ?—At the working face men have largely provided for timbering, and get it in their prices. When that new timbering rule came about there was no consultation to ask whether the men thought it would be advisable. The contracts were already made when that new timbering rule came into force, and that rule meant 20 per cent. more work to our men in many instances, and there was no consideration given to them for that. I think special men ought to be appointed to solely attend to this timbering, and particularly withdrawing. Withdrawing ought to be done when the place is not turning coal.

32066. Are the men responsible for drawing the timber as well as setting it ?—Largely.

32067. In some districts they have a method of separate people setting timber. That is what you mean ?—Yes.

32068. The collier would be under an obligation to set timber to keep himself safe ?—Yes. The difficulty you have even with timbering rules is this, and I have had to write continuously to our inspector about it: it says timber shall be supplied within a certain distance of the working face, and the men go to work, but there is nothing said, only that the place is all right at the pit bottom. When they get in they find they are short of timber. Then it is the man's duty to come out; that is what the Act says: you must not work in danger. We think that there ought to be more than that, because this man is losing time; he is not told there is no timber, but when he gets there he finds that out himself, and has to go back, and lose his time through being short of timber.

32069. When he gets to the face he finds that he has not enough timber to go on with ?—Yes, that is it.

32070. Will you tell the Commission what was the special difficulty about timbering in these rules in Yorkshire ?—Before these rules came in we used to have a recognised system of 6 ft. Of course setting timber was always required. There was always that provision. Now we have it reduced from 6 ft. to 2 ft. 6 in., in instances, a prop every 2 ft. 6 in., 4 ft., 4 ft. 6 in.; very few 6 ft. I do not object to more timber being used, but we have not been recompensed for the extra work.

32071. That was the new timbering rule. Was any intimation given to the Yorkshire Miners' Association about those rules ?—What was given was simply a notice from the Home Secretary, as has been given, or it is hung up on the pit hill for a fortnight for any man to take objection to. I would not give much for that.

32072. Was the Association consulted at all about the price ?—Not that I know of; there was a strike in some parts of Yorkshire over this rule.

32073. I thought you would have some knowledge which would be information for this Commission. Was the Miners' Association, as such, consulted about the special timbering rules ?—Only in the ordinary way any new rule is.

32074. You suggest to the Commission that there was a wage question involved in these Timbering Rules ?—Yes.

32075. It was not that the men objected to setting any amount of timber for their own safety ?—No, not at all; it was reducing their earning power by putting additional work on to them without any recompense.

32076. You had a contract to get so much coal and set timber at such a distance in such a way, and this interfered with your contract ?—That is so.

32077. In your judgment, supposing a notice had been sent to the Yorkshire Association, would it have been possible for your Association and the coal-owners to have agreed to a general system ?—I think it would, much better than what is done at present. There should be a round-table conference as to any alteration in mining rules, which ought to take place between the Society and the coal-owners.

32078. You think you could have got Timbering Rules through to everybody's satisfaction without any stoppage if you had been consulted about the matter ?—Yes, I do.

32079. What do you mean by the cages being stopped in the shaft to collect men from various seams? Is that lowering and raising men ?—Yes, it is, and some serious things are happening in Yorkshire, particularly with this, and it is causing us to look at it. Some of us have been cognisant of this danger for some time. Just now there was a serious accident at Barrow, and one before at Orgreaves, and one before, smashing into the bottom, at Glass Houghton. We lost seven men at Barrow, and six injured. My contention is this: I know I shall be told it is expensive, for every seam there ought to be a shaft. Once a man starts from the pit bottom, there ought to be no gathering and getting so many men at a seam, but they should go straight through. At Barrow they picked up six men and made those six into 17 at another seam. There was a flatsheet with two hooks fixed in. This is an iron door which falls down on the cage, with two hooks for the purpose of men getting in.

32080. That is to fill the gap between the cage and the side of the shaft ?—Yes, when that falls it should hold the cage and prevent it from vibrating. This door was never picked up, and hence when they started raising the cage it caused it to tilt, and then it went into one side and knocked it back to the other side. There were no gates at the end of the cages, and the men tumbled out. A pit cage ought to start from that particular bottom and go to the top, and if it wants to take more it should come down and go to the top again. There should be no stopping process.

32081. That would be practicable to carry out. He fills a load from the bottom of the shaft, and the next cage he takes two-thirds of the shaft, but he must take only from that place. That is what you mean ?—Yes.

32082. What is the distance between the hooking holes, commonly ?—From the bottom how far up do you go before stopping ?—I think about 75 yards, but I will not say that I am correct as to the figures.

32083. Have you another one ?—About 110, the next, I think.

32084. You lower the men and take the men to all these various stages night and morning ?—Yes.

32085. You are objecting to having a part cage of men from the bottom, another part at the next place, and filling up at the next ?—I am objecting to having any resting place in the pit mouth. It is simply resting on a rope at all times. There are no fallers for the cage to rest on at any of the two mouths.

32086. Are the coal measures flat ?—Fairly flat.

32087. That is rather a sharp grade. They lower this coal to the bottom level ?—They lower coal down to this bottom and fetch all coal from the bottom seam with the winding engines to the surface.

32088. Could they not treat the men similarly, rather than run this risk ?—It is a hydraulic appliance they lower the coal with, and a clutch brake.

32089. (*Mr. Ratcliffe Ellis.*) Do they bring it to the mouth and take it to the bottom and bring it all up ?—They lower it down.

(*Mr. Enoch Edwards.*) There is no difficulty with the coal; it is with the men.

32090. (*Mr. Ratcliffe Ellis.*) Would the men get out less quickly ?—It is not a question of quickness; it is a question of safety.

(*Mr. Enoch Edwards.*) The witness suggests the danger in raising would be less if the cage filled at one point rather than filling at so many.

32091. (*Mr. Ratcliffe Ellis.*) Would not the men object to that ?—No. In this instance the accident happened to roadmen. It was a gathering up. They put seven on at the bottom landing, and made them into 17 at the next landing, and so the thing happens.

(*Mr. Ratcliffe Ellis.*) It occurs to me the men would get out more quickly.

32092. (*Mr. Enoch Edwards.*) You say it is a dangerous process, and you think that the attention of the Commission should be called to it. With regard to the question of travelling roads what do you mean by travelling roads for workmen in and out ?—What I mean is on the haulage roads and the jinny gates more particularly than the ordinary gates, where accidents happen in Yorkshire, because you have manholes at each side and endless rope continually running about one yard and six from the floor, and tubs fastened on this rope at intervals of about 8 yards apart.

32093. Interrupting you for a moment, can you tell me the reason for having one manhole on one side and one manhole on the other ?—There are several reasons. First of all, perhaps, for cheapness. The next thing is it will be because men travel in on one road side and out at the other side to try to keep out of the way of the tubs.

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32094. You suggest men may travel down on one side and up on the other, and that the manholes should be on the side he is travelling?—Yes.

32095. Is there any physical difficulty in making these manholes?—I do not think there is at all one side, but if we are going to prevent these accidents—a very serious accident happened last week at Allerton Byewater Colliery, where a man was travelling up a jinny gate—a single road at the bottom and a double road at the middle, and he was travelling to his working place and the run was off the road, and he was not stopped from travelling: and he was not able to get to the manhole before he was caught and killed by the jinny setting off again.

32096. (*Mr. Ratcliffe Ellis.*) Did they break away?—No, they had been off. If it had been a separate travelling road he would not have come into contact with them and he might have been living now. He was only 27 years old.

32097. (*Mr. Enoch Edwards.*) You have a single road up to the middle, and then a pass-by, so that there are no physical difficulties existing. They could make the whole road a double road?—There is no room at either side for a man to stand clear.

32098. Is it customary for men to travel up and down?—A notice says at the bottom that while the jinnies are running the men shall not travel, but the man at the bottom says "You can go up: we do not know how long we shall be getting the run on again."

32099. You suggest that a separate travelling road should be made in all these main haulage roads?—Yes; as tubs are continually running on these roads.

32100. Would it be convenient to make that road alongside your haulage road?—Yes, it would. I have another idea as well. You generally make them either intake or outlet. When men have to travel you keep it in better condition than if used for an air road pure and simple.

32101. If the return airway was used as a travelling road it would be better kept if traversed by the men than it would as an air road purely?—Yes. Then there is another difficulty, the large amount of dust on these haulage roads through the men and ponies travelling together. It is simply a blinding process. What has interested me for some time has been to find out what has been the cause of so many bronchial complaints, and doctors tell me that it is so much dust. There is so much dust inhaled in the mine.

32102. You suggest that there should be separate travelling roads?—I do. There would be more safety and less dust to contend with, and you could sprinkle them with water more systematically.

32103. Where it is not physically possible to make a separate travelling road do you suggest that there should be more manholes?—I suggest that the roads should be made wider, and that you should have a travelling road at the side.

32104. Would there be a difficulty in keeping up the roof in a place so wide?—No: you would get your bars crossed and put an extra prop, which would serve as a partition.

32105. You think, in your opinion as a practical working miner, that it could be done?—Yes.

32106. As far as you can see you could do it in Yorkshire?—Yes.

32107. What do you wish to tell the Commission about machines?—What I want to say is this: we are not opposed to machinery—I do not care how easy they make work—but by using machinery you cannot hear anything clearly, which is a great disadvantage to a man in a pit. He can hear a roof breaking, as a rule, when he is working by hand, but if you have a machine cutting there is as much noise as if you were hitting a hammer on an anvil in a blacksmith's shop. If possible there is more where there is a conveyor used, because you fill coal into an article 2 ft. wide of sheet iron. 20 men at a face of about 100 to 150 yards in length. You cannot hear the roof at all, and there is a certain amount of danger when you cannot use your ears to advantage while these machines and conveyors are working.

32108. In the face of that danger what do you suggest to us?—As soon as there is room made, when there is plenty of coal filled out for a yard, or whatever distance you like, a bar shall be set. I want it so that a man shall be safe, but I do not want to go to the extreme and say 4 ft. or 4 ft. 6 in. The bars set in machine faces let over on top of the coal do not look as safe as a bar with a leg under each end. I think a man ought to be engaged in doing nothing else but timbering, because when men are filling with conveyors they are filling at a rate, and they are not supposed to stop to set timber until the conveyor stops, and the danger of noise ought to be enquired into.

32109. You suggest as the coal is taken out and the ground is cleared and a new roof made, it is impossible to ascertain with the noise, so that you would make doubly sure by setting a bar as you go on?—Yes.

32110. Is there any difficulty in doing that?—No, except this: employers point out it may necessitate stopping the conveyers somewhat more often; that difficulty can be got over by using a longer bar, and having special men to set timber.

32111. It need not interfere with it, but in a new roof you would have the satisfaction of covering it with a new bar?—Yes.

32112. You raise the question of small coal being put in the goaf?—Yes.

32113. What is the objection to that? Are you afraid of goaf fires and spontaneous combustion?—That is what we are afraid of, because it is small stuff that is cut by the machine, smaller than that cut with a pick. The majority of our machines cut coal 5 ft. under which is thrown into the goaf. The goaf is completely filled with that small stuff. It is small coal, as small as it is possible to grind it, and there is bound to be a certain amount of danger from dust.

32114. Is there much dirt mixed with it?—Not very much. In our Silkstone seams there is hardly any dirt.

32115. Apart from Denaby have you had much goaf fires in Yorkshire?—We have had little ones, apart from Denaby, burst out. There has been nothing particularly serious, but I think that prevention is better than cure. We think this thing may prove much more serious in the future than we anticipate at present with this large amount of small stuff being put into the goaf.

32116. It is small slack—smudge?—It is small coal.

32117. It is fairly clean?—Yes.

32118. You do not hole in the dirt at all?—You have to skim the bottom sometimes.

32119. This small dust you think will be a source of danger: in your opinion you will get spontaneous combustion: that is your view?—Yes.

32120. What do you mean by altering the present system of investigating mine accidents? As a practical pitman I would rather prefer that you should put your view of this question before us. I think it is better that you should do so?—We have a provision for coroner's inquests and I have had some funny experiences with regard to coroner's inquests. They are not all bad, but some of them have funny ideas.

32121. We know that most of them are lawyers and doctors?—One man considers that before you can go as a Society, or on behalf of the workmen, you must get a petition signed by all the workmen at this pit. You have 1,000 workmen in some pits, and to stand there with a petition and get it signed by every man every time there is a fatal accident, I think is a bit absurd.

32122. (*Chairman.*) It is only a majority that is required. 501 men would be enough if there are 1,000 men in the pit?—Yes, but it would be difficult to get 501. Another point is this: we find a difficulty in this way. Sometimes they ask you to put a question, but you have to put it through the coroner, and you cannot get from a witness through the coroner what you would get from the witness by cross-examination yourself as a practical man. I think you see what I mean. We say we ought to have some *locus standi*, and be able to examine and cross-examine the witnesses.

32123. (*Mr. Enoch Edwards.*) Have you had much difficulty in Yorkshire about this?—Not as much as in some counties, but a fair amount in Yorkshire.

32124. All your coroners do not take that view, that you should have a petition?—No, there is only one.

32125. You are often in court on cases because you have so many accidents?—Yes, we are often in court.

32126. With the majority of your coroners, you do not experience any difficulty?—Except that we have to put our questions through him instead of cross-examining. It is necessary to cross-examine a witness when you put questions to try to get further evidence. That is what we object to, somewhat.

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32127. (*Chairman.*) The coroner always puts your questions, I understand you to say —Yes, but he perhaps would not put them in the typical way I should like to put them to the man to get my answer.

32128. (*Mr. Enoch Edwards.*) You want to feel that the law should be such that you or any of your friends may go and represent your Society ?—That is so.

32129. I want to know what are your views with regard to an examination for certificates for managers and under-managers ?—The rule says that they shall have five years' experience—mine experience, the rule says—before a man sits for a first-class certificate.

32130. He shall have those years of practical experience at a mine; it does not say that he shall be a collier ?—What we find happening in Yorkshire to-day is this: young men who could not show any practical experience so far as workmanship is concerned, are put there and get a certificate. They are popping up and down the pit, and being a kind of office-boy, and they call that their five years' experience, but what we say is that a man should have five years at the coal face and get practical experience in order to qualify.

32131. It would still be necessary that the pitman with his knowledge of the face should have the theoretical knowledge to get the certificate ?—I do not want to debar him from that, but I want him to have some practical experience. I do not mind his having a good knowledge of theory.

32132. Your practical man to be a manager must have been a collier ?—I think that ought to be one of the conditions.

32133. Supposing he had walked about the mine, measured the mine, taken tests of ventilation in a mine, been in an outer pit for five or six years, you would not, call that practical experience ?—No, I think I could walk up and down a mine for 20 years, and I should not, apart from theory, know much about it.

32134. Whatever special qualifications he may have, whatever expert knowledge he may have, you suggest in these certificates that he should have some experience as a collier at the coal face ?—I do. I think that should be one of the conditions.

32135. You apply that to managers ?—Yes, and under-managers.

32136. (*Mr. Ratcliffe Ellis.*) And inspectors, I suppose, too ?—And inspectors, too.

32137. That would mean the whole of the management of the mines in this country, and the inspection of these mines must be by persons selected from the working face ?—It does not necessarily follow.

32138. Working at the face, then ?—It does not follow. He may have ordinary ability as a practical workman, but he would have to get his theoretical knowledge also, and then he would be suitable.

32139. Whatever knowledge he had, he could not get it unless he worked at the face ?—Then he would have to be appointed by the owners after that.

32140. (*Mr. Enoch Edwards.*) Your position is that he must have practical knowledge as a pitman; but you admit that he must have sufficient technical knowledge of all these questions to entitle him to take his first-class certificate ?—Yes, that is so.

32141. (*Mr. Ratcliffe Ellis.*) You said that the inspector ought to have backbone, that is to say you explained it, he must be able to hold his own with the management ?—Yes.

32142. He must be equal in qualification. He ought to know as much as the manager ?—Yes.

32143. If your view was carried out, and there could be neither inspector nor manager who was not selected from the workmen, then they would be all alike, if a man must have five years at the working face. That is your view I understand, before he can qualify either to be manager, sub-manager or inspector he must have five years at the working face. It means you must select all these men from men who have worked at the working face. That is the meaning of what you say ?—Yes.

32144. Would you go so far as that ?—I should go to practical experience. I do not think I quite follow what you say. You do select them largely, but you do not select officials now. A manager has not the control he ought to have with the practical experience, because he has to appeal to an agent who, in many instances, knows nothing about a mine, before he can carry out any reforms for safety which entails any expense.

32145. If this is your view, all managers, sub-managers and inspectors of mines must qualify themselves by five years at the working face ?—I think he ought to have five years.

32146. However theoretical he may be, and however able he may be, and however scientific he may be, unless he has had five years' experience at the working face you consider that he should not be able to qualify as an inspector or a manager or a sub-manager ?—If he was not practical he would lack something.

32147. That is your view, whatever qualification he has unless he has been five years at the working face as a collier, he should not be selected as a manager, a sub-manager or an inspector ?—When I say a "collier," I mean at the coal face. A man is not considered qualified to work by himself until he has been two years at the coal face.

32148. It does not say two years ?—As a collier.

32149. Do you go as far as this, that there should be no inspector appointed, that there should be no manager appointed, no sub-inspector appointed, however scientific his attainments may be, and whatever experience he has had down the pit, unless he has had five years' actual working at the working place ?—I do.

32150. Then I do not think it is much use my asking you any further questions about that, because we do not agree upon that subject. The Act of Parliament requires now before a man is given a certificate that he must have practical experience ?—Yes.

32151. You say that is not enough and that it must go further and say "practical experience as a workman at the face" ?—Yes.

32152. You must know many colliery managers in Yorkshire who have never worked at the coal face ?—Yes.

32153. Are there none you know who are qualified for the duties they have to perform ?—There are some, but if it is a question of giving the names———

32154. No, I do not want you to give me their names. —There are some who are theoretical and scientific.

32155. I should not ask you to give names because that would be invidious, but amongst the various colliery managers in Yorkshire there are many distinguished men, are there not, who have never worked at the coal face. Do you say that none of those men are qualified to manage a mine ?—Not in my opinion, from a practical standpoint. Of course we have some good managers in Yorkshire that have certificates from the coal face.

32156. In your opinion these men are not qualified to do the work, because they have not worked at the coal face ?—Because they have not had the practical experience at the coal face.

32157. You mean by that working at the coal face ?—Yes.

32158. You think that there ought to be five years at the coal face ?—I do.

32159. Under General Rule 38 you made these examinations at the colliery at which you were checkweighman ?—Yes, and other collieries, too.

32160. Had you made bad reports before ?—Yes.

32161. But still you were allowed to go on making them ? —Yes.

32162. You do not know any other reason that stopped you than this bad report which you have suggested ?—I do. I think that I was examining too carefully, and the people did not like the idea of it.

32163. You said you had made bad reports, but still you went on examining ?—Yes.

32164. Does it not occur to you that there might be some other reason ?—I do not know that it does. Why I was stopped in my opinion was this: I only give it as an opinion, that they found out I was debarred by the wording of Rule 38 as a checkweighman, but I think the reason was that I went and inspected the pits too minutely for them.

32165. You had made bad reports before, but you were allowed to go on examining ?—Yes, I made bad reports both against the men and deputies before as an Inspector under Rule 38.

32166. And still you were not interfered with but were allowed to go on ?—Yes, that is so.

32167. The object of that rule, so far as one knows, I suggest to you is this, that where the men in the mine

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suspect there is some danger they want to be assured that it is safe, or, if it exists, it is removed. Do you not think they would be more encouraged to be satisfied if there was an examination made by a man who himself had to undergo the same danger in case there was a danger?—I do not think they would. All that men fear (and there is a fear) is this: there are some cases one could name where, when men have ventured to make a report, their position has not been worth much at that pit after.

32168. Supposing we forget the fear of recriminations, do you not think if they were free from that fear they would really be the best men to make an examination into the conditions under which they were going to work themselves?—I am bound to take my own personal experience. I do not think a man working at a pit to-day knows more than I do by continually going in, and I have had 23 years continuous work at the pit.

32169. You do not think the men would be more satisfied with their examination?—I do not.

32170. You said you objected to notice being given that such an examination was going to be made?—Yes.

32171. Why?—For reasons and circumstances that have happened. Perhaps you have had the report from a certain district that for two or three days they have been short of timber, and you send a requisition to the manager to say at 4 o'clock to-day that to-morrow you will inspect that pit, and then there will be any amount of timber sent down on the date he receives the note preparing for the inspection.

32172. That is what you want, to get the material sent down?—Yes, but I want to point out this: if that notice had not gone probably that timber would not have gone either.

32173. You want to secure the safety?—Yes, but I want to prevent that occurring again, and I can only do it by showing these people when it happens.

32174. You mean by prosecuting them?—Certainly: that is the only solution.

32175. With reference to the suggestion that the districts for the firemen are too large, is that generally the case in Yorkshire?—Generally it is, but in some of the pits it is not.

32176. Can you suggest any rule prescribing the size that a district should be under one fireman?—I do not know that I could properly, but I could if I thought it out. I will give you a rough idea. I think that no man ought to be asked to supervise 100 men working at a face in different places.

32177. Could you suggest to the Commission any rule that could be made to secure that the districts were not too large?—I do not think that any man can properly examine 30 places—from 20 to 30 longwall faces in three hours, and find out what he ought to try to find out.

32178. That is some guide: 20 or 30 longwall faces are more than a man can examine in three hours?—Yes.

32179. Is that the nearest you can approach to a suggestion?—I think if a man had say 15 gates in a certain district in addition to his air roads, that would be plenty of work for him to give his whole time to.

32180. You think a rule might be made to say that a man should not be equired to superintend and examine more than a certain numb r of gates within a certain time, including his airways and the other things he has to do, and you think that 30 is too many?—I think that 20 is too many.

32181. How many do you say then?—I think 15 are plenty.

32182. How many gates as a rule do they have to examine now?—I can give you three or four particular pits straight off. In one pit we are doing about 2,500 tons a day with four deputies.

32183. How many gates. I want to compare the state of things now?—What you have down the pit on day shift would be anywhere from 500 to 550 colliers.

32184. There would be more than one collier at a gate?—Four colliers as a rule.

32185. Would there be 100 gates there?—More than 100 gates: four men and three men: four men in some and three men in others.

32186. How many deputies are there?—Four deputies, and in addition to that they have to do all the haulage roads.

32187. You think some rule might be made of that kind which would afford a guide as to the extent of the deputies?—I do, and *it* will take him his eight hours to examine 20 gates and the air roads. He cannot do it in three hours: it will take his shift.

32188. Do you find it general that the deputy has to do more than examine?—Yes, I do, as a general rule in Yorkshire.

32189. There are exceptions?—There are exceptions to every rule.

32190. There are exceptions in Yorkshire, where the duty is confined to the examination of the place?—Very few, but there are a few.

32191. I want to ask you about timbering. Do you agree that at the face the collier is the best man to do his timbering from the point of view of safety, if he has time?—I think there ought to be special men appointed for timbering alone.

32192. Do you agree—we have had evidence about this—that the collier is the best man to look after his safety at the face from the point of view of timbering?—I expect we shall differ in opinion. My opinion is that special men ought to be engaged for timbering. I think that is the best thing that can happen.

32193. You think that the collier is not the best man to do the timbering?—The collier is working by results.

32194. We will not talk about wages or time?—That is one of the main things, apart from safety.

32195. You have pressed on the Commission that working at the coal face is the only place you can get this practical experience. A collier having worked at the face knows most about timbering?—Yes.

32196. Then is he not the best person to look after his own safety and to put up timber wherever it is wanted?—I should engage one of those men with experience at the face to do nothing but devote his whole time to the place, and setting and withdrawing timber.

32197. You do not agree that the collier can best look after his own safety in regard to timbering, if he had time to do it?—If he has practical experience he is; but I think the best thing is to engage special men to do the timbering.

32198. So far as the collier is concerned, if he has time, can anybody look after his safety better than he can himself in regard to timbering at the face?—I do not know; there are degrees in that.

32199. I mean if he had time to do it?—I should say the collier who has worked at the face knows how to timber the face. I say the best system to prevent accidents is to have special men engaged to see to the timbering.

32200. Is that to give the collier more time to get coal, and have his whole time to get coal?—It is not particularly to give him his whole time to get coal, but to put more liability on the company to see that there is a sufficient supply through the special men they appoint.

32201. You do not agree with me that the collier is the man who can do the timbering the best in the interests of safety, but you think somebody can do it better?—I think that special men is the best thing to be got for that.

32202. Your Rule 100 in Yorkshire is: "The miners must build good pack walls, and set a sufficient quantity of props and bars for safely securing the roof and sides of their own working places, and add to them or renew them when necessary, or when told by the manager, undermanager or deputy." That was your rule before the new timbering rule was established?—Yes.

32203. You had to put up what timbering was necessary?—Yes.

32204. However near the face it might be, it was the colliers' duty to put it up?—Yes.

32205. The new Timbering Rule says you must put it up within a certain distance of the face?—Yes.

32206. Now with regard to systematic timbering, your objection was because more timber had to be put up than you had been in the habit of putting up?—Yes.

32207. Was it necessary for safety?—I do not object to the amount of timber that is put in.

32208. Do you think that the Timbering Rule was necessary for safety?—I do not object to the new Timbering Rule, but it put more work on our men without any counterbalance of earning power.

32209. From the point of view of safety, you think that the rule was desirable?—I think it can be better discussed at a round-table conference.

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32210. Do you not think it desirable in the interests of safety? It is better than it was before?—I should not say it was worse. I think it would be better discussed between the two contending parties.

32211. It was better than it was before; it is safer?—I do not know whether it is safer or not.

32212. If it is not safer than before, it is not better?—I do not know whether it is or not.

32213. Supposing you had been invited to discuss that rule, you would have agreed to it?—It is not a question of whether I should or not.

32214. You would have said no?—I do not know. I probably should have said yes. I am prepared to do anything for safety, only we work by results under contract condition, and now we are going to alter it I should say that it was necessary to have a re-arrangement of prices.

32215. The objection you would make if you had been called in to discuss it would have nothing to do with safety. You would say it may be safer, but we must be paid more money if that rule is to be carried out. That would be your objection?—I do not think that would be altogether my objection. I am always prepared to agree to anything for safety.

32216. Then what would have been your objection?—I think that rule could have been improved considerably had some practical experience been brought to bear upon it.

32217. In what direction could it have been improved?—We have men now at collieries where they order them to set timber every 2 ft.

32218. In what respect can that rule be improved?—I think considerably.

32219 How?—By appointing special men to do the work.

32220. Your objection would not have been to the rule, but because you want more wages, or somebody else would have had to have done it. That would have been the objection?—Not particularly.

32221. What particularly, then?—Practical experience taught me it ought to be so and so. I will give an instance. In some places you are paid for setting bars, especially on a face side.

32222. I know all about that?—I want to give you this, which bears upon it.

32223. It does not answer my question?—Yes, it does. I am trying to show you. We are paid for bars under special contract, 3d., and we have to set when ordered by a deputy; but where we have to set them under systematic timbering, we cannot leave too many up. They knock them down when they are paid for, and say they do not need a bar there.

32224. I will not press you about it. It seems to me clear, and I think it will appear so when we get it on the notes. Your objection, if you had been invited, would not have been to the rule itself, but that new conditions must be made with the men involving wages before that rule should be established?—I think if you started me to dig a dyke a foot deep for a 1s. per yard, and you wanted me to make it twice that depth, I should want more than 1s.

32225. What is your objection with regard to this small coal that comes into the goaf. What do you say should be done with it?—I do not think it ought to go into the goaf. I should think the safest place would be at the top.

32226. The men would be paid for it?—Do not put that argument to me, because it is not correct. They are paid for throwing it into the goaf, so much per ton. When you have a good trade they let it go out at some pits, but when trade is bad they keep it in the pit.

32227. Would it be any advantage in point of wages if brought up the pit?—I do not think so.

32228. You say by putting the stuff in the goaf there might be a danger of spontaneous combustion, or a goaf fire?—Yes.

32229. That is the only objection to it being put there?—Yes.

32230. With regard to the investigation in coroners' enquiries, what alteration do you suggest should be made in the present law?—That a provision should be made for any trade organisation to send representatives to an enquiry to put questions and cross-examine witnesses; that it should be made law that we should have such facilities granted, and that we should have reasonable notice of any inquest.

32231. What would be your object in attending an inquest?—To see whether that man has been supplied with suitable timber, or whether there had been an outburst of gas, and whether that place was properly inspected.

32232. The relatives can attend now?—Yes.

32233. They can appoint persons to represent them?—Yes.

32234. They do, frequently?—Yes.

32235. Would you extend that right to anybody to attend the coroner's inquest?—I should extend it as far as appointing people from trade organisations to attend.

32236. Your view is that representatives from trade organisations should attend?—Yes.

32237. The right to put questions would have to be subject to the coroner's discretion, as to whether a question was a proper question to put. The coroner now says, "I will put your question for you," and puts it. You would not wish to have a right to put a question which a solicitor would not be allowed to put?—I should want the same right as a solicitor. I should not ask for much more, because he gets his own way to a fair extent.

32238. (*Mr. Smillie.*) Are you aware that in every case of a mining inquest, information must be sent to the inspector of mines for the district?—Yes.

32239. No coroner is supposed to go on with an inquest without first having intimated it to the inspector of mines?—That is so.

32240. The inspector of mines is entitled to be present and watch the proceedings?—Yes.

32241. So far as your experience goes, the inspector of mines is entitled to put questions and cross-examine?—Yes.

32242. With a view to bringing out the facts?—That is so.

32243. You claim your fellow workmen, in the interests of future safety, should be entitled to the same right as the mines inspector?—I do.

32244. The vast majority of your mines in Yorkshire are worked with safety lamps?—They are largely, not many without.

32245. Yorkshire is known as a fiery district?—Yes.

32246. Is the use of coal-cutting machinery largely on the increase in Yorkshire?—It is.

32247. You have two kinds of machines—electric machines and compressed air machines?—We have.

32248. You undercut to the extent of 5 to 6 ft.?—4 ft. 6 in. to 5 ft. 6 in.

32249. Is a compressed air machine with a disc in use?—Yes.

32250. It would make an undercut at the outside of 5 or 6 in.?—It tapers down.

32251. It tapers down to 2 or 3 in. at the back of the cut?—Yes.

32252. That will produce a very considerable amount of small coal?—It does produce smaller dust than a pick would.

32253. There is a considerable quantity of dust produced in a cutting of that kind when you are undercutting 4 or 5 ft. an average of a 5-in. undercut?—There is a large percentage of dust.

32254. Is that dust so small which is given off in the cutting as to practically fill the air, and be in suspension in the air while the cutting is going on?—It is. You cannot see a lamp 7 yards off in some instances.

32255. When the men undercutting with the pick there is not so much dust in suspension in the air?—No.

32256. Not the same clouds of dust?—No.

32257. You mean the coal does not come down itself when it is undercut?—No, it has to be blown in many instances.

32258. Blown down?—Yes.

32259. In a machine wall you may have as many as 6 or 8 or 10 shots?—Yes.

32260. Right in the coal face to bring down the coal?—Yes, all in a row.

32261. Is it a safety explosive that is used in a case of that kind?—Largely safety explosives are used.

32262. Who stems the holes?—In some cases the men.

32263. The workmen?—Yes.

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32264. Are they placed in possession of the explosive and the detonator ?—Not the detonator, but the explosive.

32265. They must get possession of the detonator before they stem the hole ?—Yes. The deputy comes and sees they put the ammunition in.

32266. He gives them the detonator to put in ?—Yes.

32267. They stem the shot, and the shot-firer fires the hole ?—They are not always competent persons. We had two serious accidents of recent date.

32268. A person supposed to be a competent person under the Act fires the shots ?—They should be.

32269. Have you any reason to think that persons who are not competent are sometimes appointed ?—I have two cases now before me which I can give you. One man was killed, and the other is walking up and down totally blind. It is at Allerton Silkstone. On November 16th, 1906, a man called William Tinker had both eyes blown out. He was a miner; and they appointed a shot-lighter who had been receiving compensation who had had no previous experience shot-lighting, or with caps and detonators, calling it light work, and this miner went to his working place where the shot had miss-fired, and another hole had been put in about 15 inches away, and this shot-lighter fired it, and made no report as to the miss-shot, and as soon as that poor man started to work he had both eyes blown out. We have a more recent case at the same pit, 11th September, 1907; Henry Wilkinson was fatally injured. This man was a miner, and this man they appointed to be shot-firer had previously been engaged in other work at the pit, and happened an accident for which he had been receiving compensation, and they sent him to shot-fire as light work, and to prove that he had no experience the jury at the inquest told the coroner to reprimand the shot-firer and mind in future that he used more care. He said "I never shall be a shot-lighter any more." Here are two cases, one killed and one blinded, and the accidents came about by employing men lacking experience as shot-firers. I do not think I should be qualified to use a detonator with the 23 years' experience I have got. I have had no practice in it. He ought to pass an examination before he is allowed to do it.

32270. When you say it should be necessary that a shot-firer should hold a certificate of competency, you mean as to his knowledge of explosives ?—Yes, and as to gases, too.

32271. He is supposed to make an examination of the working place for gases and dust ?—Yes.

32272. You say all the small coal and dust taken out of the holes is put back into the goaf ?—Yes.

32273. You think one of the dangers is goaf fires, which may break out in the future ?—I do.

32274. Is there not a second danger of blown-out shots going into the goaf and rising, and perhaps igniting coal dust and causing an explosion ?—That is possible, and that does happen; and sometimes you get a little spark. You can get a spark from the machine in cutting.

32275. Electrical machines and compressed air machines? —Yes.

32276. On that ground also, in order to avoid the risk of a coal dust explosion from blown-out shots, you think it would be safer not to put the dust and the small coal in the goaf ?—I do. I think it is the wrong place to put it.

32277. You understand from what you have read, and discussion at conferences, whether it arises from practical knowledge or not, you believe that coal dust is largely responsible for some very violent explosions ?—Yes.

32278. Either by itself or in combination with an explosive mixture ?—Yes. We thought that caused an explosion at Pope & Pearson's, Altofts, Normanton.

32279. Special Rule 92, referring to miners, workmen and others says, no persons where locked lamps are used shall fire a shot without authority from a manager or an under-manager. That will apply to the coal as well as the stone ? Yes.—

32280. Do you think where coal-cutting machinery is in use and seven-eighths of the shots may be bored, that the under-manager or manager gives permission to fire the shots on all occasions ?—9[illegible] times out of 100 he does not know until after they are fired.

32281. He gives permission ?—He gives a wholesale permission.

32282. He does not make any personal examination of the shots as to how they are placed or the nature of the stone ?—The manager or under-manager ?

32283. Yes.—No, very seldom.

32284. If that is so this Special Rule 92 is not carried out ?—No.

32285. The shots are fired first ?—The under-manager or the general manager does not know they have been fired until they are reported in the book.

32286. The shot-firer is supposed to report every night the number of shots that he has fired in the book in order to ascertain the total number of shots fired ?—Yes.

32287. Your Special Rule with regard to the deputy's examination in the morning provides that an examination must be made within three hours of the men starting work ? —Yes.

32288. Is three hours not rather a long time from the time a working place is examined until the men are entitled to go into it ?—It is too long in many mines.

32289. There might be a serious accumulation of gas in three hours ?—Yes, and a very serious accident.

32290. In longwall workings there might be a serious alteration from the weight and bad stone which was all right when he was in ?—Yes.

32291. On that ground you think the time ought to be shortened ?—Yes.

32292. You think it is not possible at the present time because of the extent of the deputy's district to do it in less than that time ?—He cannot do it in these cases now in three hours.

32293. His examination at the present time in the larger districts may be largely examination of the working faces only ?—Yes.

32294. From your own experience of certain districts you have seen underground, would it be possible for the deputy to make the examination he is expected to make by this Act and go in and out all of the roads and gates ?—Do you mean within three hours ?

32295. Yes.—No, it is impossible.

32296. In addition to making his examination in three hours in the morning he is also supposed to make a second examination during the course of his shift, which should be as extensive as the first examination ?—Yes.

32297. If it requires three hours of the morning and cannot be done in that time, that would mean that six hours of his time would be taken up with the two examinations ?—Yes.

32298. What are their hours, they are generally eight per day, are they not ?—Yes.

32299. In addition to that, under the rules he is entitled to look after the general safety and the ventilation, the pony drivers, and other things ?—Yes.

32300. Is he supposed to do all that in his two hours' additional time ?—Yes. He does not make two examinations as a rule because he cannot do it in one shift.

32301. Under Rule 13 he is supposed to do that ?—But he does not go to those places twice in one shift as a rule.

32302. It is largely because of the extent of the district ? —Yes, it is.

32303. As a class your deputies in Yorkshire are quite as good as in any other part of the country ?—They are good as a rule.

32304. You have no fault to find with them ?—No, with the exception of the young men who start deputying when they know nothing about it.

32305. You have in your mind some cases where, in your opinion, persons have been started as deputies who have not had the necessary theoretical qualifications or the practical knowledge to qualify them for the position ? —Yes.

32306. Is it your opinion that the position of deputy about a colliery is the most important from the point of view of safety of any official about a colliery ?—Yes, it is. I think he is in daily touch with workmen and the general conditions much more than a mine manager or an under-manager, and that a large responsibility devolves upon him.

32307. You are of opinion that he should hold a certificate of competency after an examination ?—I am.

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32308. In order to secure that no person who is not qualified, so far as examination can prove qualification, shall be appointed to that position?—Yes.

32309. You have no real objection to persons who are not merely working class men gaining five years at the coal-face in order to qualify for a mines inspector?—Certainly I have not.

32310. The present class of mines inspector you have very little objection to, but you seem to think that with their present very great qualifications they would be additionally qualified if they had had five years' practical experience underground?—I do.

32311. That is really your position?—Yes.

32312. Your suggestion is not to limit the appointment of managers and mines inspectors to merely working men so much as to secure that they will have the necessary practical experience?—That is what I am after, I want efficiency all round. It does not matter to me which class they come from.

32313. (*Chairman.*) With reference to Mr. Ellis's inquiry as to why you were dismissed from your position as an examiner of the mine under Rule 38, you said you had on previous occasions made bad reports. Had you ever made a bad report of a mine on the occasion when you went into another mine?—Yes.

32314. You had made bad reports before?—Yes, and also good reports. I reported as I found things.

32315. On previous occasions you had found no disadvantage in having made those bad reports?—Not directly, because they could not take disadvantage. I was paid by the workmen. I did not suffer myself, but my family had to suffer.

32316. How do you mean?—I had one boy out of work nearly three years through the action of his father.

32317. Notwithstanding that they did not take the objection they might have taken, namely, that you were a check-weigher and were not eligible to make the examination?—I expect they suddenly found out that the wording of Rule 38 was against me.

32318. You think you did suffer every time you made a bad report, not you yourself, but you think as they could not get hold of you they got hold of your boy?—Yes.

32319. Your theory is you were disqualified on the last occasion because they suddenly found out what the law was?—Yes, they found out a case which happened 16 years prior to my own in Durham.

32320. A check-weigher appointed under Rule 38, and that appointment was disallowed as being illegal?—Yes.

32321. That is your view, at all events, as to what happened?—Yes.

32322. (*Mr. Smillie.*) Under your Special Rules a miner employed at the coal-face is not entitled to go into any other place than his own working place?—Not without permission from the manager or under-manager.

32323. He may go into the working place next to him to look for lost tools?—No, they will not allow that at some mines without permission from the management.

32324. Consequently, a person might be employed in one of your large collieries in Yorkshire for years and not know any part of the mine except the particular district in which he is himself employed?—That is what generally happens.

32325. It has been suggested the fact a person works in a mine specially qualifies him, other things being equal, to make the examination because he knows the mine so well. Is it the case that many know very little about the mine except the particular part in which they work?—80 per cent. do not know about the pit except their own places.

32326. Consequently, a man who has been a practical working miner will be quite as able to make an examination with the manager with him as a person employed in the mine?—Yes, he would be.

32327. (*Chairman.*) Do you wish to say anything more to the Commission?—No. I do not know there is anything more I want to say.

FORTY-SIXTH DAY.

Thursday, 5th December, 1907.

PRESENT:

Lord MONKSWELL (*Chairman*).

H. H. S. CUNYNGHAME, Esq., C.B.
F. L. DAVIS, Esq.
ENOCH EDWARDS, Esq., M.P.
THOMAS RATCLIFFE ELLIS, Esq.
JOHN SCOTT HALDANE, Esq., F.R.S.
ROBERT SMILLIE, Esq.
S. W. HARRIS, Esq. (*Secretary*).

Mr. SAMUEL HENRY WHITEHOUSE, called and examined.

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32328. (*Chairman.*) Whom do you represent?—The Somersetshire miners.

32329. You have been deputed by them to give evidence on their behalf?—Yes.

32330. Have you had any special conference with the Somersetshire miners with a view to finding out what their opinions are upon the various points which you are going to discuss to-day?—I have discussed them with the Executive.

32331. The proof which has been put into my hands represents the conclusions which you and the Executive arrived at in common?—Yes.

32332. You say that inspectors should be appointed on proof of their fitness for the work of the district to which they are so appointed?—Yes.

32333. You think the conditions are so varied in mining districts that a person who would be competent to carry out the duties in one district would not necessarily be able to do so in another district?—Yes.

32334-5. I suppose you would meet that, as you say in your statement, by appointing a board of examiners who should examine all candidates for inspectorships, and that no inspector should be appointed until and unless he satisfied the board as to fitness for the special work of the district to which he was to be appointed?—Yes.

32336. You would have some special examination for a particular district, and if an inspector passed in one district he should not be able to be transferred to another district without passing another examination. Is that your notion?—That is my idea.

32337-8. Then you say that one of the qualifications should be that a Government inspector should have at least five years' experience of the working of mines in the district to which he is to be appointed, or in a district which had similar conditions. What do you mean by five years' experience of the working of mines—experience as an inspector or practical experience as a working miner, or as an engineer, or what?—So long as he had practical

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experience, whether as an inspector or a miner or anything of that kind, I should not differentiate. I should be satisfied so long as he had the experience.

32339. Then what experience would you consider good enough?—I think at least he should have some experience in the management of a mine.

32340. You think that at all events he ought to have been an under-manager or something of that sort, for five years?—Yes, something of that kind.

32341. Supposing he had been a fireman for five years, would that be the requisite experience?—He would have to be a very good fireman for me to think that he was qualified for the position of inspector.

32342. But supposing by chance a fireman was an extremely good man as fireman and had five years' experience as fireman and perhaps he had a first-class certificate, as I understand some firemen do have?—Yes.

32343. Then would you consider that experience was sufficient to enable him to sit for examination for the district in order to qualify him to be an inspector?—Yes.

32344. Do you say then that a man should not be appointed to inspect a fiery district who had only experience of a non-fiery district, and *vice versa*?—I think it is obvious.

32345. You go on to say that you think that the Secretary of State should only appoint on the recommendation of the Board of Examiners. Now, as you are aware, the Secretary of State does as he pleases, and in point of fact the mines inspectors have to pass a very severe examination I understand; but you say it should be compulsory on the Secretary of State to set up a Board of Examiners and that everybody who wished to be a mines inspector should come before that Board of Examiners?—Yes.

32346. (*Mr. Ratcliffe Ellis.*) You think that not only this Board of Examiners should be appointed to examine into a man's qualifications, but that the Home Office should not be entitled to appoint even a qualified man unless he was nominated by this Board?—That is what I say.

32347. (*Chairman.*) Then you say that the whole system of Government inspection should be arranged on a different basis, and the inspection districts should be so arranged as to enable the inspector in charge to visi each pit in his district at least once in three months. How many inspectors do you suppose you would want for each district in order that that might be carried into effect?—Just about one or two more than we have now; but they would all be allotted to districts—and would be responsible for their districts. We have three now.

32348. What is your district?—Somerset—the western district.

32349. How many are there now? There are a chief inspector, and two assistants, I suppose?—Yes.

32350. Do you think that perhaps another three, making altogether half-a-dozen inspectors, would be sufficient?—Yes.

32351. That is to inspect every pit at least once in three months?—Yes.

32352. But at present, I understand, in all the districts, including, I imagine, the southern, as a rule each pit is only inspected once a year?—I do not think it is inspected anything like that.

32353. Then do you mean that the present inspectors do not do their duty?—I mean to say that the area is so large and so much of their time is occupied in clerical work, in reporting to each other, in travelling, and all that sort of thing, that they are travelling and doing clerical work during a great deal of their time.

32354. First of all as to the size of the district in your southern district, you have three inspectors, and according to your information I imagine the southern district should be divided into three parts and each inspector should be given one district?—Not necessarily three parts. I think more than three.

32355. Yes, but supposing you only had those three inspectors as at present, on that basis, as I understand you, the three inspectors would not go about the whole district, but they would each have a district apportioned to them?—Yes.

32356. But then there being only three inspectors in the whole southern district results in this, that the pits are not visited even once a year?—I do not think they are.

32357. Then how could half-a-dozen men visit the pits three or four times a year?—The system, as I understand it, is that the chief inspector has to be in constant correspondence with his assistants, and the assistants have to be in constant correspondence with the chief. If the chief inspector lives in Newport, Monmouthshire, and an accident occurs in Cornwall, if the chief cannot go himself he has to find out which of the other two can go, and it takes a considerable time to find that out. Then the travelling has to be done, and then the assistant has to report to the chief and the chief has to put the report in proper form, and there is time spent in travelling and time wasted on clerical work and all that sort of thing. Therefore, if the matter were reorganised on the basis I suggest twice or three times the number of pits could be inspected as are at present inspected by the same staff.

32358. By the same number of inspectors?—Yes.

32359. Therefore, you consider that under your system it would only be necessary to appoint double the number of inspectors that are at present at work?—I think so.

32360. Then you take a very different view from many of the witnesses who have been before us on behalf of the men. You say that there should be no assistant inspectors, but that each district should have one inspector who would be responsible to the Board of Examiners?—Yes, and that office should be open to the best of the working men to become inspectors.

32361. (*Mr. Ratcliffe Ellis.*) To everybody?—To everybody—that there should not be three classes or two classes, but that there should be only one class.

32362. (*Chairman.*) Then how would you pay that class? Would you pay them on the same scale as the present inspectors and assistant inspectors are paid?—I should not lower the salary at all.

32363. Then would you have everybody paid on the same basis as the chief inspectors?—Yes.

32364. You would have six inspectors in your district, all of whom should have the pay of the present chief inspector?—Yes, I think so.

32365. Then you also add this, which is a new point to me, that the appointment should be for a term of years, at the end of which the appointment should be open to a competitive examination to find out whether the inspector has kept himself in touch with the advances of the times. Do you think that the man would be willing to take the appointment on those terms?—I do. I think it is absolutely necessary in the interests of the safety of the miners and of the property that the inspectors should keep up with the times.

32366. Do you suggest that there should be at the end of every number of years an examination?—Yes.

32367. At the end of what number of years?—Ten years.

32368. That is to say that at the end of 10 years an inspector should submit himself to an examination. If he did not pass that examination what should happen to him. Do you suggest he should be retired on an allowance or what?—Yes. It would pay the country to make an allowance to get rid of a man who was not competent.

32369. Then you say that the Board of Examiners should have power to revise the areas of inspection districts from time to time in order to enable the inspectors to fulfil their duties. That is to say, that you would place on the Board of Examiners which you would set up some of the duties which are at present carried out by the Home Office?—Yes.

32370. Then, in point of fact, that Board of Examiners would, to a very considerable extent, take the place of the Secretary of State?—To some extent, yes. Might I amplify that by saying that what I mean is that the coalfields are considerably changing. In some counties and in some districts mines are opening and in others mines are closing up, and if one inspector had a district which was being opened and another inspector had a district which was being closed, I think that the Board should have power to revise those districts so as to give the inspectors as nearly equal work as possible.

32371. But why should not the Home Office do that now?—I think the Home Office has plenty to do.

32372. Then you say that provisions should be made so that any alleged neglect of duty or incompetence on the part of an inspector, whether such allegation be made by coalowners or miners, should be properly and fully inquired into. What sort of provision do you suggest for that?—That a number of examiners, or a number of owners, or a number of managers, may make a complaint if they have good grounds for it, to some court to be named and the court should inquire into the truth or otherwise of those allegations.

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32373. That some court of inquiry should be set up?—I think so.

32374. Not an ordinary court of law?—No.

32375. What sort of people would you make the judges in that court of inquiry?—I think that is rather outside my province to say. I will content myself by saying "a suitable court."

32376. You suggest that a special suitable court should be set up. You would have a Board of Examiners—that is one sort of court which you would set up—and then you would have a further body of men who would decide only one question, namely, as to the competency of the Government inspectors?—Yes.

32377. First of all, you would have a Board of Examiners to say whether, in their opinion, a man was qualified; and then you would have this court to say when they thought a man had become disqualified?—I lay most stress upon what I consider the first point, namely, neglect of duty.

32378. What you would bring before this court would be not so much incompetence as neglect of duty?—Yes, neglect of duty.

32379. Then you say that if an inspector should find a mine dangerous, he should have power to call in two of his colleagues from some other similar district, who, if they confirm the local inspector's opinion, shall join him in making application to some authority to be provided (that is another authority) for power to suspend work in the mine until the danger has been removed. That is to say, you would give absolute authority to three mine inspectors to make application to some other authority with power to suspend working the mine, and the other authority to be provided would not be the Home Office, because the Home Office already has authority to do that, I imagine, has it not? Looking at Section 42 of the Act, you do not agree that that is sufficient to effect your purpose—to bring the men out of the mine if it is dangerous?—I do not. I will tell you in a few words what I do mean. I have known cases in which the inspector has considered the mine dangerous, and the manager has not considered it dangerous. It takes such a long time to put these provisions into operation that the men continue working in danger while the inspector and the manager are disputing. What I want to do is to get that matter settled quickly. I would not depend upon the judgment of either one manager or one inspector. The inspector is appointed, as I think, in order to secure safety, and he may consider the men are in danger and the manager may think otherwise. Now I would have it, if I possibly could, so that that point should be settled as quickly as possible; and if the manager would not agree with the inspector, the inspector should call in two others in order to confirm his opinion, and if they confirmed his opinion those men should apply for an injunction to stop the working of the mine until the danger is removed.

32380. That they should apply for an injunction not to an ordinary court of law, but to a special tribunal set up for the purpose?—I am not so sure about that. They might apply to an ordinary court of law, I should think.

32381. Then you are not very strong on having another authority?—No.

32382. You are strong on the point of the Board of Examiners, and you are rather less strong as to the court that is to decide with regard to neglect of duty, but you think there ought to be a court that should decide as to whether inspectors have been guilty of neglect?—Yes.

32383. You have some doubt as to whether it would not be desirable to set up yet another court who should be the supreme authority to decide whether or not the men were to be brought out of the mine?—I am very strong upon the thing being done, but as to how it should be done I am not disposed to suggest.

32384. But you think it quite probable that an ordinary court of law would be a satisfactory tribunal?—I do.

32385. I think that pretty well covers all you say under that head. Now we go to the question of inspection by men under General Rule 38. You agree with a good many other witnesses who have been called before us that the Act ought to be amended so as to give the men power, under General Rule 38, to appoint not only persons who are at the moment practical miners, but who have been practical miners?—Yes.

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32386. Then you also add, "The restriction contained in the Act that the persons to make the inspection must be working at that particular mine at the time they are appointed, considerably reduces the value of the provision made." But that is not so. I understand the wording of the Act of Parliament is that men from any other mine may be appointed under Rule 38. There is no such restriction in the Act of Parliament. I believe managers sometimes object to men from other mines going down the mine, but I fancy it has been decided that they have no right to object?—My reading of the Act is different to yours.

32387. I think you are wrong there, and that your second objection to the Act falls to the ground, so that if the first amendment which you suggest were put in, namely, that the men should be free to employ men who have been practical miners, that would meet your view?—Yes. I find I was wrong with regard to the meaning of the Act.

32388. Then what are the reasons why you think men who have been practical miners ought to be appointed, rather than that the men appointed should be restricted to those who are at present practical miners?—In actual working, while the law, as you say, gives the miners power to appoint two from other collieries, the managers generally object.

32389. But why do you consider it would be advantageous sometimes that men should be appointed who have not been practical miners? If your amendment became law, it would be possible for you to appoint a man who had been out of the mine for 30 years, and who, say, had been a tradesman, and had kept a shop for 30 years. You would not have any limit. Supposing a man has been five years in the pit and has made himself practically acquainted with the working of a mine, he would be eligible under Rule 38, however long he has been out of the pit?—Well, he is eligible to sit upon a jury to decide at a coroner's inquest, and if he knows enough for that, surely he ought to know enough to inspect a pit.

32390. What qualification is there for sitting on a coroner's jury? I thought any man was qualified to sit on a coroner's jury, without special qualification. Surely he need not have been a miner in order to be able to sit upon a coroner's jury?—Exactly.

32391. However, you would have no restriction. You say that however long a man has been out of a pit he should be eligible under Rule 38?—Yes, because I think the good sense of the men would lead them to appoint the right persons.

32392. Do you suggest that partly because you think from your experience that the men are afraid to make an unfavourable report with reference to a mine?—In some cases.

32393. So that you think it is desirable to appoint a man who is not working in the pit, and who perhaps never expects to work in a pit again in the course of his life, so that he may not be subject to any influence on the part of any mine manager or owner?—Yes.

32394. That is one reason?—That is one reason.

32395. Have you known any cases in which men have suffered in any way from giving unfavourable reports?—They cannot possibly suffer in my district where I am now because they do not get appointed. We do not take advantage of this Rule 38 for fear of the consequences.

32396. Then you think that if the fear of the consequences was removed by this alteration of the law which you suggest, you would take advantage of Rule 38?—I do.

32397. How long is it since you have had an inspection made in your district under Rule 38?—We do occasionally make them where the mine owners are favourable to the men doing it. I suppose it has been constantly done in some pits. In fact I know it is done.

32398. You mean that where you have confidence in the mine owner, and where you think a mine owner will not object to be told the truth about his mine, you constantly inspect under Rule 38?—Yes.

32399. But where you have not sufficient confidence in the mine owner so as to be at all certain that the men will not get the worst of it if they make a bad report, Rule 38 has not been put in operation?—That is so.

32400. With regard to the payment of these men you do not suggest that they should be paid otherwise than by the workmen—the miners?—No.

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32401. With reference to the inspection by officials under Rule 4, you say that you think the persons appointed for this purpose should be compelled to undergo a suitable Government examination to ensure the appointment of really competent persons, and that the class of persons appointed as examiners are not always competent to carry out the duties contemplated by this rule?—Yes.

32402. But both the manager and an assistant manager must have got a first or second-class certificate, must he not. Is that not enough?—I think the person who has charge of the safety of the mine and has to report whether the mine is safe or not should at least show that he is competent to make such a report.

32403. Do you mean the fireman?—Yes.

32404. You think that there should be an examination for the fireman?—Yes.

32405. And you say that the examination papers should be couched in terms which could be understood in the district where the examination is held? You would have naturally different examinations for firemen in the different districts?—Yes.

32406. You say you cannot think of a better way to ascertain whether firemen or other officials are competent than by an examination. Would you insist that previous to that examination being held they should have had experience underground?—Yes.

32407. How long experience would you suggest?—At least 10 years.

32408. With regard to the standard of discipline and enforcement, you say the highest standard should be attained?—Yes.

32409. You say you would not allow a colliery owner or manager to impose fines for breaches of discipline. Then how would you deal with breaches of discipline? Would you deal with them in all cases by prosecution?—Serious breaches.

32410. Or first of all, perhaps, by a reprimand or by dismissing a man?—First of all by reprimand.

32411. Then if the man persisted you would deal with the case by prosecution and perhaps by dismissal?—Yes.

32412. You say that the establishment of Special Rules is dilatory and expensive. With regard to that you say that the framing of Special Rules, instead of being the duty, as it now is under the present Mines Act, of the owner, agent or manager in every mine in a district who have to submit them to an inspector, would be better, more cheaply, more quickly and more effectively done if the Joint Committees in force in almost every mining district, representing as they do the body of the owners and workmen, were to undertake that duty, with the inspector present at the inception and during the progress of the framing of the rules, and the findings of the Joint Committee plus the inspector sent direct to the Secretary of State. Who composes the Joint Committee which you say is in force in almost every mining district?—The representatives of the workmen and owners who meet for other purposes.

32413. Then you suggest that that Joint Committee which meets for other purposes should first of all have any suggested rule by the owner submitted to them before it is promulgated and before it goes any further?—Yes.

32414. Then as to falls of roof and sides you say that there should be a plentiful supply of timber properly and systematically set, and that to secure proper timbering only skilled workmen should be employed in setting it, and in working places. Then you would have special men, as they have in Durham, who are appointed to look after the timber of the mine; you would not leave it to the man who was working at the face to do his best for himself?—I would certainly insist that a man should do his own timbering in the face.

32415. But not behind?—Not behind—not in the roads. Of course that all depends upon the system of the district; some districts find it best to do it one way and some another. I am in favour of the coal-getter doing his own timbering.

32416. You say that more frequent inspections should be made by officials in places known to be requiring special attention. Then I suppose if more inspections have to be made by officials it would be necessary that the fireman's district should be reduced in size?—Yes.

32417. With regard to the ordinary work of a fireman, as he understands it now, do you think he can get through his work as a rule in the mines you are acquainted with, or is his district too large?—I am afraid there are too many firemen or examiners, as we call them, who have other work than examination to do, and they cannot get through their work.

32418. Supposing they had not other work besides the examination to do, but supposing their work was entirely confined to looking after the safety of the miners, do you think the districts would be too large?—No, I do not.

32419. Then you say the rules as to timbering should be made to suit the special circumstances of the district or colliery, and should be strictly enforced?—Yes.

32420. You point out that General Rule 22 provides that: "The distance between the sprags or holing props where they are required shall not exceed 6 ft. or such less distance as may be ordered by the owner, agent or manager." In the absence of an official it is left to the workmen to decide whether they are required. In Rule 83 of the Special Rules of the Bristol and Somerset districts it is provided that certain persons shall see that: "The roof is safely secured and maintained in accordance with the notice posted near the top of the shaft or entrance to the mine, specifying the maximum distance at which the roof shall be supported, and that it has such additional supports as may be necessary to make the place safe."—That is so.

32421. You go on to say here again the discretion of the workmen comes in; you do not say this ought not to be, but you adduce it to support your suggestion that only skilled and competent persons should be employed and made responsible for their own and others safety. Then you do not object to this General Rule, but what you do object to is that persons are working at the face in some of the mines you know who are really not competent to set timber, and not competent to judge whether such timber ought or ought not to be provided?—Yes; and that the inspection is not frequent enough.

32422. Then as to accidents in haulage roads, you suggest there should be separate travelling roads, that the best materials should be used, and that proper persons should be employed to manipulate the appliances used in haulage roads. I suppose you would acknowledge that in some mines separate travelling roads would be a matter of so much expense as to be practically prohibitive, or do you think that in your mines you could always have separate travelling roads?—It would certainly be expensive, but I should not consider the question of expense in a matter of safety.

32423. Then you think that however expensive it might be it should be compulsory to provide travelling roads?—Yes.

32424. And you would not be content with having a gangway on one side?—Well, that is a separate road, is it not—if it is wide enough and properly secured.

32425. If the haulage roads were so wide that the men had room to walk at the side that would be sufficient, in your opinion?—And if there was a partition at the side.

32426. Would you have a regular partition or would you be content with props put up now and then?—I should want it fenced off like a railway.

32427. Then you suggest the employment of proper persons to manipulate the appliances used in haulage roads. Do you suggest that persons who are not sufficiently skilled are employed in looking after the haulage?—Yes. It very frequently comes under my notice that men who understand nothing about machinery are employed to let down inclines and use all sorts of appliances, and they cause accidents to themselves and others through their want of knowledge.

32428. As regards safety lamps, you say you consider it unsafe to use open lights in any mine where parts of the mine contain or give off gas. You say you think safe lights should be used wherever gas is given off, and that it is open to question as to whether a safety lamp has yet been discovered. You mean, I suppose, that the present safety lamps are not perfect in construction?—I do not think they are.

32429. Are all your mines worked by naked lights?—No, we have some safety-lamp pits in the south of the district.

32430. Have you paid any attention to the various kinds of safety lamps? Is there anything you would like to say to the Commission as to your experience of what classes of safety lamps are best?—I should not like to recommend any of them; I think they are all faulty.

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32431. (*Dr. Haldane.*) Do you mean faulty as regards safety ?—Yes.

32432. Not faulty as regards light-giving power ?—No, as regards safety.

32433. (*Chairman.*) At all events, you have had some experience with safety lamps ?—I have worked with them.

32434. In your opinion every lamp that you have worked with is more or less faulty ?—Yes.

32435. You think that they might be improved ?—I do. I think it is for the management to decide which class of lamp they will use at a colliery.

32436. Then we come to investigations into mine accidents. You say that all or any of the persons entitled under Sub-Section 8 of Section 48 of the Mines Act to be present at an inquest and to examine witnesses should have the right to appoint some practical person or persons to inspect the scene of the accident as soon as possible after the happening thereof. As a matter of fact, the inspector always does hurry down after an accident, does he not ?—Yes—a long time after; especially in districts with big areas it is a long time afterwards that he comes.

32437. Do you think that a great many more people besides the inspector should be allowed to immediately go down a mine and see the scene of the accident ?—I think the scene of the accident should be inspected as soon as possible after it has happened; and it occurred to me that the workmen, the relatives of the deceased and other persons who would be entitled to be represented at the inquest should also be entitled to make inquiry immediately after the accident and appoint somebody to inspect.

32438. That would mean, among others, an official of the Union, if a workman who was killed belonged to the Union ?—Not necessarily.

32439. Then someone who had a right to speak on his behalf. It is usually, if he is a Union man, an official of the Union, is it not ?—Yes.

32440. Then you say that the power to exclude these persons, as well as the general public, should be taken from the coroner—you mean to exclude them from the inquest ?—Yes.

32441. You think the coroner should be obliged to hold the inquest in public and not to exclude anybody ?—Yes. I do not think he ought to have power to keep anybody out of the inquest as he has at present. All the privileges in the Mines Act are subject to the orders of the coroners, as you know, and I do not think they ought to be.

32442. Then you say that the selection of the jury by the local police is open to objection. I do not know how coroners' juries are selected. Are they selected by the police ?—I will tell you what happens in country districts. The local policeman is the coroner's warrant officer, and he gets the writ and warrant from the coroner and he selects the persons to serve on the jury. That is open to great objection.

32443. Then your complaint is that these coroners' juries are frequently composed of men who are not practical and not the best men for the purpose ?—That is so.

32444. Who would you suggest should choose the jury ?—That is where the difficulty comes in.

32445. You have not thought that out, perhaps ?—No. I know it is objectionable. It is much more easy to find fault than it is to mend sometimes.

32446. Then you say as to examinations for managers and under-managers that it is open to objection that candidates living in a district and having only local knowledge should be allowed to sit in another district under another Board where the conditions are totally different. I think we have rather dealt with that already ?—No, that is a different thing altogether This refers to candidates for managers' and under-managers' certificates, not to inspection at all.

32447. You would have the same rule applied to candidates for the position of managers and under-managers, and you would have the same system applied as you would have applied to the Government inspectors ?—Yes.

32448. That is to say, that each man should only be competent to act in the particular district for which he was certified ?—Yes, and the papers of questions for those candidates should be local.

32449. Would you have a *viva voce* examination besides the papers ?—Yes.

32450. (*Mr. Enoch Edwards.*) You say that the area of the inspection district in which you are included is a large one ?—Yes.

32451. Can you tell the Commission how large it is ?—It includes Somerset, Gloucester, Monmouth, parts of Brecon and Glamorgan, Cornwall, and, I think, Dover.

32452. You have one district inspector and two assistant inspectors ?—Yes.

32453. They do not all reside at Newport ?—One resides at Newport and one at Bristol; and one, I think, near Weston-super-Mare.

32454. So that in case of accident the inspector or assistants, or any one of them, would have a long way to travel ?—Yes.

32455. How far would it be possible that he would have to travel ?—From Newport to the Cornish mines would be well on for 200 miles, I suppose.

32456. Have you calculated what amount of the inspectors' time is taken up in travelling ?—I should hazard the opinion that quite half of the time of these men is taken up in travelling, correspondence and clerical work.

32457. Have you carefully thought out your statement that pits are not examined once a year by inspectors ?—I do not think I have said that. I said that I did not think all the pits are examined once a year. Some of the pits are not examined once a year.

32458. Do you mean the colliery as a whole, or part of a colliery ? Do you suggest that there are some collieries which the inspector never goes near in 12 months ?—Again, that is not what I said. I do not call a visit to a colliery and a talk with a manager, inspection. I mean actual inspection. I think the insides of some pits are not examined once a year by anybody.

32459. Then you do not wish to state that the inspector does not visit the pits ?—No.

32460. What you suggest is that he does not always inspect the pit when he visits the pit ?—That is what I mean to say.

32461. But if he did so visit and inspect, he would inspect part of the pit ?—Part of the pit.

32462. Do you know any cases where the inspector has examined thoroughly, as a fireman or a manager would examine, all the working places of a pit ?—No.

32463. Did you ever hear of one such case ?—No.

32464. Do you suggest that if there were double the number of inspectors in your district that would meet your view as to the inspection that is necessary ?—Speaking off-hand, I should think so, provided that all the clerical work was taken from them and they were set down in a centre so that they could reach the pits easily, and that the only reports they had to make were to the Home Office instead of to the district inspector.

32465. Let us examine that for a moment, because that is rather an important matter. I understand you to suggest that there should be somewhat equal districts, and that there should be single inspector districts and no chiefs ?—Yes.

32466. You say that the present assistants have to send reports to their chief ?—Yes.

32467. Would not the inspectors in the single-area districts have to make reports to someone ?—To the Home Office, certainly.

32468. What would be the difference between making a report to the Home Office and making it to the district inspector ?—What I want to save is the time of the chief in having to put forward the reports of the other two.

32469. So that you do not apply that to the assistants ?—No.

32470. But you see he would have to make a report of his work to someone ?—Exactly.

32471. And it would occupy the same time, probably more, in making a report to the Department than making a report to his chief ?—Yes.

32472. Of course if you suggest that you would spare the chief so far as his report was concerned ?—Yes.

32473. And he would only make his own report like all the others ?—Yes. What I wished to drive home was that I think six men would thoroughly inspect each colliery in the south-western inspection district once in three months. If you gave six men 60 mines apiece they would be able to do that.

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Mr. S. H. Whitehouse.

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32474. Would they be able to make such an examination as an overman or a fireman makes?—No, I do not think they would, and I do not think it is desirable. So long as they see the whole of the pit generally, and so long as a man who has had experience and who is a practical man sees the pit generally, he does not want to make such an inspection as the fireman does. The fireman has to sound the roof in every working place, and he has to make marks and all that sort of thing.

32475. Still, you suggest it should be a more general inspection than it is now?—I do.

32476. Taking the class of men dealt with under your scheme as inspectors, you suggest, first of all, that they should be practical colliers or practical pit-men?—I do.

32477. Do you draw any distinction between a man who spends 10 years in a pit at one job or 10 years at another?—Do you mean between a man who spends 10 years in one district and a man who spends 10 years in another?

32478. No; supposing a man has gained his experience as a pony driver, or a jigger, or wagoner, or collier, or otherwise, do you draw any distinction?—I do not think it is likely for any man to remain a pony driver for 10 years. I think he would have gone through all the grades by then. I had done so long before then.

32479. At any rate I want to know the nature of this experience, because many of the witnesses are strongly of opinion that he should be a collier—that a pit experience can only be the experience of a collier?—I do not think a man who remains a pony driver or a haulier would be able to pass such an examination as I should suggest. The examination would test whether he was fit to be an inspector.

32480. (*Chairman.*) You think that even although he had only been a haulier all the time, he ought to be allowed to sit for the examination?—Yes, I should not bar him.

32481. (*Mr. Enoch Edwards.*) Mr. Ellis's suggestion was that it was open to working-men only, and you said it was open to everybody. You do not close it to anybody if you accept the qualification that he must be a practical man?—He must be a practical miner and have 10 years' experience.

32482. (*Mr. Ratcliffe Ellis.*) That is, 10 years' experience as a workman in a mine?—Yes.

32483. (*Mr. Enoch Edwards.*) So that you do not close it, but that must be a condition, so that he should know something about what he is going to do?—Exactly. If you will permit me to say so, you insist that the manager before you employ him, should know something about the matter. Why not an inspector?

32484. (*Mr. Ratcliffe Ellis.*) But not 10 years' experience?—That is a question of the length of time, but you insist that he must know something about it before you employ him.

32485. (*Mr. Enoch Edwards.*) What you suggest is that he should have practical knowledge?—Yes.

32486. And you think it will take him 10 years before he can acquire such practical knowledge as he ought to have?—I do.

32487. With regard to the inspection by the men under the General Rule, do I understand you to say you do not have much of it in your district?—We do not.

32488. I think you said you got it where the employer was favourable?—I mean where we know the employer will not punish a man for speaking his mind. We have some of those cases, happily.

32489. Have your men had much difficulty in carrying out this rule?—They are diffident in carrying it out. They have fears, whether well-grounded or otherwise I do not know, but they have great fears about it. Where it is possible they employ other persons; they send me sometimes to some collieries, and I go and make inspections on their behalf where the employer will allow me to. In cases where they can do that they always make those examinations, but at other collieries they do not.

32490. Do you suggest that if workmen, carrying out their powers under this section, found any breach of rules, such as airways too small, falls of roof not cleared up, or ventilation defective, if they reported them they would go in fear and trembling that something might happen?—We have had cases of that kind.

32491. If anything happened to one of your pits in Somerset, what would become of the man?—What do you mean.

32492. If a man was discharged for making such a report, how would he fare at all the other pits in Somerset?—They would not employ him, because we have the "character-note" system in vogue in our district.

32493. Then he would be shut out of employment, and he would have to leave his berth, or leave the district, and his trade there?—Yes, or the Union would keep him.

32494. The Union does very generously keep a lot of those men?—Yes.

32495. It is rather a useful institution in Somerset now?—Yes, we find it so.

32496. Have you many checkweighmen at your collieries?—Yes, at every pit.

32497. Have the checkweighmen been called upon to examine at all?—They are not allowed to; the owners would not allow them.

32498. Is it the opinion of your people and of yourself that the law should be so drawn that the embargo should be taken off the checkweighman and he should examine, if he liked?—Yes.

32499. That is assuming he is a practical man?—Assuming he is a practical man—and they are all. They have appointed the checkweighers out of the pit as a rule.

32500. There have been such appointments?—Yes, there have been.

32501. You were asked as to what was a practical man. If he had been out of a pit for 30 years would he be a practical miner? You do not wish to suggest that he would be, do you?—I do not.

32502. A man who has left the occupation for 30 years is not a practical miner in the same sense as he would be if he was working to-day?—No.

32503. I have heard one man suggest 10 years: I think you suggested 30 years?—No, I do not think I did. My recollection of what I said is this, that if there was no limit to their choice, the good sense of the men would urge them to look to that point.

32504. Yes, you said that afterwards, I know; that is to say, that if the men had the power they would appoint a man who was more up-to-date?—Yes—a proper man.

32505. Therefore they would have a wide field to select from if the law was altered and checkweighmen were eligible?—Yes.

32506. With reference to discipline, are there many fines imposed at the colliery offices in Somerset?—They often try it on, but we do not allow it.

32507. Would those fines be for breaches of the rules affecting the safety of the men, or any mere matter of contract or discipline, or as to sending out dirt with coal, or something of that sort?—They try to impose fines for all sorts of things—breaches of General Rules, breaches of Special Rules, and breaches of a local law that we have, and for dirty coal and all sorts of things—but we do not allow fining. We stop it; we do not believe in it.

32508. What are your reasons for that: I should like you to put it before us in your own way: if a man has committed an offence at a pit which is not a serious offence, but a minor one, why do you object to the employer and the man arranging a fine rather than force him before the court? What is the object of it?—I will tell you: supposing a lad is found riding upon a load in defiance of the rules, and they fine him 1s. or 2s. 6d., he may do it again because he knows that he will only be fined, whereas if it is known all over the district that it is a penal offence, it has a salutary effect. I prefer prosecution to fining for that, and many other reasons of the same kind.

32509. It is raised here as an objection to withdrawing this power to fine that you withdraw the colliery officials so often from the colliery to the police courts. I should like to put it to you that if the power is abolished which they seem to have now to impose a fine, and if they had to go before the court in every case, would it not be likely that there would be less cases going before the court?—I think it would be, but still the colliery officials would have the power of discharging, and they would still have the power of selecting competent men, men who understand the rules and who are fit to carry them out.

32510. But in practice you think the whole thing would be reduced, because of the fact that the men would know that they would have to go before the court?—I do. I think the discipline would be maintained very much better under this system than by fines. I think fines contribute to breaches of discipline, and laxity.

32511. It is on those grounds that you suggest the men ought not to be able to settle by means of a fine at the colliery office?—It is.

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32512. And it is because you believe it would add to the safety and strengthen the discipline of the pit that you suggest all cases of breaches should go before the court?—I do; that is the reason why I suggest it.

32513. Upon this question of Special Rules have the workmen in Somerset been taken into confidence by the Government inspector and the colliery people with regard to the establishment of Special Rules?—Not long ago we had a very long job at trying to make one uniform set of rules for the whole of the Western District. Now what happened was this: both on that occasion and when the 1887 Act was passed; the rules were sent to the inspector—which is the Home Office, of course—and they were being discussed by owners and the inspector for a good many months, and the workmen saw nothing of them until they were posted at the pit top. That caused another delay, and I think it took away from the workmen all power of making the rules in anything like the shape they wanted them. I think if the workmen are to be consulted at all with regard to the making of the Special Rules they should be consulted at the beginning, from the very commencement, and not after they are posted at the pit, because it is a very objectionable thing for a workman to object to what his employer is putting up.

32514. When the Home Office inspectors, on behalf of the Home Office, and the colliery owners agreed to a sort of codification of all these rules, did they consult your Society at all?—Not until they were in print.

32515. After that they consulted your society?—Yes, and they made up their minds to have no alteration. We spent a lot of time with no effect.

32516. (*Chairman.*) You tried to make alterations, and you did not get any alterations accepted. Is that so?—No.

32517. You did not try?—Yes, we did try; we tried our best.

32518. But none of the alterations were accepted?—That is so.

32519. (*Mr. Enoch Edwards.*) Were there features in those rules to which the men objected?—Yes, strongly.

32520. What happened?—We had a good many meetings and lost our temper at some of them, and the rules remained as they were. The owners and inspector would not accept any suggestion.

32521. (*Mr. Cunynghame.*) In what year was this?—It was very recently. That was the codification of the various rules.

32522. Can you say in about what year, or what month?—It was about two years ago.

32523. (*Mr. Enoch Edwards.*) It was in order to bring a more general set of rules into use over a big area, I suppose?—That is so.

32524. Were the parts upon which you differed as to questions of safety?—Safety and discipline.

32525. So that we may take it that so far as the preparation and the arrangement of those rules were concerned, whatever representation your society and the men generally made with regard to them, it was unheeded?—It was unheeded.

32526. Nothing you could say had any effect upon the rules?—No.

32527. But still the men were all expected to obey those rules?—That is so.

32528. I observe that with regard to falls of roof and sides you suggest systematic timbering. By that do you mean one system of timbering?—I mean a system suitable to the district in which it is in force. I do not think it is possible to establish any system that will suit all districts.

32529. But it may be possible in a pit, or a number of pits, to have one system of timbering?—I think so.

32530. Do the colliers do their own timbering in your district?—Yes.

32531. Is it part of their contract?—Yes.

32532. Are they responsible for any other part of the roadway except the working face?—Just to the brow of the road.

32533. How many yards will that give the collier to attend to?—About two or three yards.

32534. He is responsible for the setting of timber?—Yes; to the edge of the ripping,

32535. After that the company is responsible?—Yes.

32536. Do you think that is a good system?—I think it suits Somerset.

32537. Have you many accidents from falls of roof and sides?—No. The number is very low indeed, comparatively.

32538. Of course they are very lean or thin seams?—Yes.

32539. In Somerset you think there is not much fault to be found with the present method of colliers setting their own timber at the face?—I do not think there is.

32540. Do they get fairly well supplied with timber?—In most cases. There are complaints sometimes in some collieries.

32541. I think you said in answer to Mr. Ellis that you used lamps partly in your district, and partly naked lights?—Yes.

32542. Have you much gas?—In the collieries where the gas is found it gives off very largely—they are very fiery.

32543. Of course you have had two or three explosions?—We have had two or three explosions, but not in the gassy part of the coalfield.

32544. With regard to inspection by the firemen, would you mind telling the Commission what is the condition of things in Somerset? Can a fireman discharge his duties and make an inspection of the roof and sides of the working face over the area for which he is appointed?—Generally, no.

32545. Does that mean because his area is too large for him?—It means because he is found other work, and in many cases he is incompetent. He is appointed not because he is a competent person, but for some other reasons.

32546. Perhaps because he is a relation of someone?—Yes, perhaps—or because he goes to the same chapel, or something of that sort.

32547. I am afraid the Commission will have a difficulty in curing relationship?—Yes.

32548. What do you mean he has to do? Is it to see that timber is got in and coal got out?—That timber is got in and coal got out, or to see that the roads are clean, and if they are not so to fill the rubbish himself. It very often occurs that he has to do manual labour between his inspections.

32549. So that you think it is not possible for him to make a thorough examination as an official under the Act?—I do.

32550. Because of other duties?—That is so.

32551. And not so much because of the size of his district?—No.

32552. In discussing the question of the certificates you suggested two examinations—one for a fiery district, and one for a non-fiery district?—Yes.

32553. Do you not think it is desirable that all candidates should have a knowledge of fiery districts as well as non-fiery?—My difficulty there is that if a man is in a non-fiery district and he has to have knowledge of fiery mines, he has to leave that district on purpose to get it.

32554. We will take your district. A portion of your district is non-fiery, I understand, and a portion of it is fiery?—Yes.

32555. So that a man can get his experience in your own district?—A small number can. Supposing there are two firemen in a pit, well, you can only put two there. I will say this for the owners of the colliery I am thinking of, that the colliery is always open to students in mining classes to visit for the purpose of getting such knowledge, and we do frequently visit that colliery for the purpose of getting that knowledge.

32556. Could you suggest any big district anywhere that is non-fiery?—No, I am afraid I cannot. What occurred to me was just the little district which I know best, where there are non-fiery mines. But I should not be strong upon the non-fiery mine certificate.

32557. It is necessary that a man who holds such a position should have a full knowledge of fiery mines, gas being one of the elements of danger?—Yes. He should know how to deal with it, and with regard to lamps, and everything of that kind.

32558. With regard to the question of accidents in mines and coroners' inquests, would you mind telling the Commission how, in your opinion, we, as representing a trade, are to get our position recognised before the coroner? What is in the minds of the miners upon that question? In what direction would they like to have that law altered?

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Mr. S. H. Whitehouse.

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—I think they would like the power of the coroner to keep them out and to generally order them as to which way they are to put questions, and what they are to do, abolished; I think the miners want to be represented at coroner's courts as a matter of right, so that they should have a right to be there and to appoint who they like to be there as a matter of right.

32559. In some way, of course, the coroner always will have to direct his court?—Exactly, but he can direct a man to go outside now if he thinks fit, and he does so sometimes.

32560. You think he ought not to have such a power?—I do.

32561. I understand you to suggest that the person so appointed should have the right of inspecting the place of the accident?—The same class of person.

32562. Of course he must be a practical pitman?—He must be a practical pitman.

32563. (*Mr. Cunynghame.*) If fines were abolished what would take the place of them——prosecution?—Prosecution or dismissal.

32564. Do you not think it would be rather hard, perhaps, on a young fellow who was careless, assuming that he did something that endangered the safety of people, but still only carelessness, to dismiss him right away?—I would warn him first and if he did it again I would prosecute him.

32565. If dismissed his career would be at an end —A good thing too, if he is dangerous in the pit.

32566. You think it would be better to give him a warning instead of a fine, and then dismiss him peremptorily?—If a man did something that endangered the safety of himself or his fellow men more than once I would not have him if I were a manager of a colliery. I would either prosecute him or dismiss him.

32567. Do you not think if that rule were rigorously carried out a quarter of the men in the mine might possibly in the course of their lives be dismissed?—There are two things you missed in what I said. I said the colliery owners had it very largely in their own hands themselves. If they would cease to employ unskilled persons there would be less need for fines or prosecution. I also said in my judgment that fines conduced to laxity. If you fine a young man 1s. or half-a-crown he does the thing again and risks the fine, but if you prosecute him he does not do it again.

32568. I want to know what the effect of dismissal will be. We understand a good many fines are levied in some districts. If you had dismissal instead of a fine in every case there would be a tremendous dismissal and the unemployed ranks would be considerably added to?—I think one or two dismissals would have a salutary effect on the others.

32569. Would you never take him on again for the rest of his life?—No, I do not say that.

32570. Your plan would be a kind of suspension?—Yes.

32571. Is not the drawback of suspension this: I am looking at the young men who are being gradually drilled into becoming good miners; if they were suspended that would mean perhaps a week of idleness, going about outside to some entertainments on the surface and loafing about, and that would not be very good for them?—What I want to convey to the Commission is this——

32572. Will you meet my objection. You have told us your view, but I want to see the value of your evidence when you come to meet objections. Will you fasten your mind on the objection?—If fines make men less careful rather than more careful they cannot be of any avail. If a week's suspension makes a man more careful I say it is better than fines.

32573. Your view is that a fine by an owner makes a man less careful, and a fine by a magistrate makes a man more careful?—No, the publicity of the thing. It not only affects the man before the magistrate but the whole district, and people know that they cannot do this kind of thing.

32574. You think that a man who is fined 5s. by an owner will become less careful, but if he is fined 5s. by a magistrate, with publicity, he will become more careful?—And make other men more careful.

32575. It seems to me an astonishing proposition; I should have thought that both would have the same effect?—Well, I only give you my experience.

32576. I am not doubting your word for a moment in giving evidence. There is another point I want to put to you. You have not answered the question as to suspensions not being a good thing on account of a man idling about. It is a drawback to suspension. If you admit it is so much counting against you I have no more to say about it, but if you say it is not, will you tell me why?—I do not think it is a drawback. I think it is the best thing to do.

32577. When a man has committed an offence give him a couple of weeks with nothing to do?—No, I do not say that; I would warn him first.

32578. Then if that fails, give him a couple of weeks with nothing to do?—No, some time; I would not say a couple of weeks.

32579. Well, give him four days with nothing to do?—Yes, that is better than a fortnight.

32580. You do not think he is likely to fall into bad habits in four days?—I think he is likely to go to the mine and say: "If you re-instate me I will not do it again."

32581. If married, what will his wife do in the four days without any earnings? I am putting the other side to you. There are drawbacks?—What would she do if he is careless and gets killed.

32582. We are on the question of what is the best deterrent. There are these points on the other side, are there not, to be considered?—I cannot do any more than tell the Commission that in my judgment fines tend to laxity rather than to carefulness.

32583. You are not able very well specifically to answer the objections I have brought forward, but I do not say they are fatal.—I say that is my experience.

32584. Now will you come to prosecutions. That you think a good method of stopping offences of carelessness?—It is a matter of degree. It is better than fines.

32585. Dismissal you consider to be best of all. You like suspension better than prosecution?—Yes.

32586. Suspension is your first remedy and the best one?—I think so.

32587. Then prosecutions, and lastly fines which act the other way, and make people more careless?—I think so.

32588. Now I come to prosecutions. Is there not some danger, if there were no fines and prosecution were adopted as the method of enforcing rules that owners would be lax in putting it in force, because of the inconvenience it would give in the mine?—Then the inspector would prosecute them.

32589. It will come to this, whenever a sprag is not properly set—do you know what I mean by the word "sprag"?—Yes, I have set a good many.

32590. Whenever one of those is not properly set and the man not prosecuted forthwith, down comes the inspector and prosecutes the owner?—I think you are stretching it a bit.

32591. I only want to know how far you are going, that is all. It is for you I am cutting the coat. I want to see what you say. Do you not think there would be dismay in many mines in your district if the inspector were to say, "There are 45 cases that have come to my knowledge of men not setting sprags and you have not prosecuted any one of them; I shall prosecute you. Take care in the next six months you prosecute 45 men." Do you not think that that position would be created?—No, an ounce of fact is worth a ton of theory, and I will tell you what has happened. The inspectors have gone through the place, or the manager has gone through the place with the inspector, and has found a man with a sprag not properly set and the inspector has said, "If you do not prosecute that man, I will prosecute you." That is what actually happened.

32592. Very proper?—Yes, very proper.

32593. You would have that happen not once, but going on every day all through England?—I think if more rigorous discipline were maintained and if we were to do that rather than fine——

32594. You are representing that is what the men would like to see come in. That is the system they would like to see come in?—I was going to say that the necessity for either fines or prosecution would be diminished by ceasing to fine, in my judgment. Our men, the more thoughtful of them, the Executive, I consider would prefer a man was taken before the magistrates as an example, rather than be fined.

32595. That system has no terrors for them?—Fining has not.

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32596. Prosecution has no terrors for them ?—Oh dear no. May I say this: if a man is prosecuted for a breach of the law after having been warned, our Society does not defend him, or have anything to do with him: our Trades Union does not defend him.

32597. And consequently there would be this large number of men prosecuted and your Society refusing to defend, alternated with a great many suspensions, and you come here to say that is what the men you represent desire as a mode of putting an end to fines. I only want to know what you want ?—My Society would prefer that prosecutions for breaches of discipline should take the place of fines.

32598. Even though those prosecutions—— ?—That is my answer.

32599. I want to go on: even though those prosecutions had to be pretty numerous ?—Those are your words, not mine.

32600. Do you agree with them ?—I do not think they would be numerous.

32601. I think we have as much as we can get out of that. I should like to ask you about these rules which were altered two years ago ?—Yes.

32602. After they were in print your men had every opportunity of discussing them and making their wishes known with regard to them ?—We had opportunities of discussing them.

32603. You wanted to see them apparently before they were in print ?—We wanted to help make them.

32604. I thought they were only a consolidation of the rules that existed already ?—They were materially altered in the consolidation.

32605. They were probably partly in print before, and some alterations were made ?—Yes.

32606. Mr. Martin, the inspector, started the whole thing ?—Yes.

32607. He got those rules out and I suppose printed some alterations in the rules ?—Yes.

32608. And marked the places where the alterations were proposed ?—Yes.

32609. Do you think that ought to have been done in pen and ink instead of in print ?—No, that is not my complaint.

32610. What is the complaint ?—The alterations which affected the discipline and the safety of the men were discussed and settled so far as the inspector and the owners were concerned before we heard of them.

32611. Your complaint is that he went to the owners first instead of coming to you first ?—No, coming to us at the same time.

32612. When he was thinking of what proposals he should make, do you mean he ought to have no right to consult privately with one or other to see what they think ?—That is not what I mean. I mean when he called meetings of the owners in the districts, in order to give the workmen an equal opportunity, he should have called meetings of the workmen at the same time.

32613. Do you mean when rules are being negotiated between the owners, the workmen, and the Home Office, the owners on the one side and the workmen on the other, that there should never be any verbal communication between the Home Office and one party without at the same time the other being present ? Is that not rather awkward for the men occasionally ?—I do not mean that.

32614. I want to know what you mean ?—I will try and tell you. Let me state what really happened. The inspector, Mr. Martin, no doubt saw and corresponded, verbally and otherwise, with individual managers. To that I have no objection. When they had got so far as to have individual suggestions a meeting of the owners of the district was called. There were several meetings, a number of meetings, and the owners and the inspector came to an agreement as to what should go in the rules.

32615. I see your point.—It was not until then, when all the amendments, suggestions and discussions and meetings had taken place that we came in and we had to object to what was done.

32616. Your objection was that Mr. Martin came to the agreement and bound himself so far as he could before he heard your side ?—Exactly.

32617. I have these rules here. You say there are several important ones in consequence of this, which were not as good for safety as they ought to be. Have you a copy before you ?—Yes.

32618-22. Will you give me an instance: I do not want you to go through them all ?—No. 20. *Mr. S. H. Whitehouse.* 5 Dec., 1907.

(*Mr. Ratcliffe Ellis.*) Rule 20 is: "They shall see that there is a sufficient supply of suitable timber provided and kept at each man's working place where mineral is ordinarily being loaded into the tram or tub for the pit shaft, or at the nearest point thereto that is reasonably practicable."

32623. (*Mr. Cunynghame.*) What are the words you would have liked put in this rule that are not here ? Put that in first.—We wanted to insert if a man had to withdraw in consequence of the neglect of the employer to provide timber that they should pay him for his withdrawal.

32624. If there is not suitable timber at the working place the workman should withdraw, and you wanted the words put in "and the owner should pay him compensation" ?—Pay him his wages.

32625. Pay him his wages as if he had not withdrawn ?—Yes.

32626. Do you think that would have been possible under rules that are only made for safety. That would have been a rule affecting wages. Are you sure there is power to make such a rule ?—Is it not provided that the owner shall see that the timber is at the working place ?

32627. There is provision that the owner shall see, and shall be prosecuted if he does not do it. The punishment as I understand it, is to be prosecution; it is not to be paying you wages when you withdraw ?—He neglects his duty, and as a consequence the workman who has a wife and family to keep loses his wages.

32628. There may be hardship in it. If those words had been proposed to be put in I am inclined to think they would have been useless and *ultra vires*. I think we should have had to take them out again. Do you not see the difficulty. You may have statutes to provide anything, but at present the rules can only be made for procuring safety. There is no provision so far as I know, in a rule if the owner does not do something he has to pay the workman.—I see the objection.

32629. You see the difficulty ?—Yes, I quite see the difficulty.

32630. You brought that forward at the conference and it was decided against you ?—Yes.

32631. Did you appeal to the Home Office in any way ?—No.

32632. Why not ? It would have been very natural, would it not ? I am sure you would have a sympathetic office to deal with ?—I think so.

32633. You had that remedy, but you did not take it ?—We did not.

32634. There is not much to complain of in this case ?—I do not think there is.

32635-6. I do not think so either. Now I come to Section 45, under which inquiries can be held ?—Yes.

32637. You are aware that has been very rarely put in force, and complaints have been made on that score ?—Yes.

32638. No complaint of that kind exists in your district ?—No, when we have had serious accidents, we have had no trouble in having special inquiries. We had the Timsbury explosion and the Camerton explosion.

32639. You have not had a special inquiry, but counsel to attend the coroner's inquest and a report from him ?—Yes.

32640. In those cases it was apparently satisfactory ?—Quite satisfactory.

32641. Now as to the question of inspection by the men. I have been rather under the impression that the object of the inspection by the men granted by the statute was to re-assure the minds of the miners working in the pit more than anything else ?—That is the intention.

32642. You would not be giving them a power of inspection to render them responsible for the due working of the mine in any way ?—I think you are right.

32643. And that they did it or not as they liked, and if they did not do it you could say that they had been guilty of dereliction of duty. That is my feeling about it ?—Yes.

32644. If that is the case, does that not point to an inspection by the men in the particular pit, because the object is to re-assure their minds and to see that things

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are going on to their satisfaction, rather than they are to undertake the work that is thrown properly on the State?—The difficulty is this, when men know there is a deficient airway, or something going wrong in the pit, they fear, if they state baldly and plainly in the report-book, that they will suffer.

32645. Again, they have the power of anonymously writing without revealing their names to the inspector?—That I discountenance always. If I were an inspector I would not act upon an anonymous letter.

32646. They belong to a Union; a large number of them at all events?—Yes.

32647. Could not they go to the Union and complain, and would not the Union be strong enough to protect them from being wrongfully treated or dismissed?—Given a strong Union anxious to protect the men I should like to know the procedure that I should take. I get frequent complaints from men. Any course I take means giving up the name of my informant, does it not?

32648. With regard to that your own view is it ought to be so. You do not like it to be anonymous?—Exactly; I do not like it to be anonymous. I am pointing out how weak this provision is. It cannot be put in force without the men being punished. I get frequent complaints, and I never hesitate to have a conversation with the inspector when I see him, and there are a good many upon which he has acted.

32649. Supposing a certain number of inspectors were appointed of a practical character, and of less theoretical knowledge than those existing already—I do not like to use the phrase working-men inspectors, because everybody in the mine is a working man, really, but I mean men who did not pass an examination of such a high standard as that of the present inspectors, practical miners with a lower degree of examination, would that meet your approval?—I differ with my colleagues on that point. I do not think there ought to be more than one class of Government inspector.

(*Mr. Cunynghame.*) I will not ask you any more upon that, because I understand it has already been dealt with.

32650. (*Mr. Ratcliffe Ellis.*) You suggest there should be only one class of inspectors, all equally qualified, and all qualified up to the highest point?—Yes.

32651. That their qualifications should be ascertained by a Board of Examiners?—Yes.

32652. Who would appoint that Board?—The Home Office, of course.

32653. Have you any suggestion to make as to its constitution?—Yes. I think it should be a small Board. I think it should be a Board consisting of somebody nominated by the Home Office, an expert mining engineer, and a workman who holds a first-class certificate.

32654. Two men?—No, three men—a Board of three.

32655. An expert mining engineer, a representative of the Home Office and a certificated manager?—Certificated miner, a working miner who holds a first-class certificate.

32656. A man working in the mine who has a first-class certificate?—Yes, that is my suggestion.

32657. I understood you to say that any person could offer himself for examination?—If he had the qualification, 10 years' experience.

32658. A man must have had 10 years' experience as a workman in a mine. Is that so?—I did not say that.

32659. Will you tell me your view about the qualification to sit for the examination?—Say, 10 years or five years. If you do not mind, say five years.

32660. You have no option?—I have no objection to five; five years' practical knowledge of the working of mines.

32661. Not a workman, necessarily?—No.

32662. Not necessarily a workman, but a person who has had five years' practical knowledge of the working of mines?—In the district to which he is appointed.

32663. A person cannot sit for a certificate unless he has had five years' practical experience in a mine or a diploma and three years?—I would abolish a diploma. I do not think it is worth anything.

32664. He must have had five years' practical experience in a mine, and you would leave it to the Board of Examiners to say upon examination whether he had had that experience or not?—Yes.

32665. This is the next point, that the Board of Examiners having then qualified a number of people as eligible for the appointment of inspectors, should go further and nominate one of those qualified persons to be appointed to any vacancy and the Home Office should be bound to appoint their nominee?—Yes.

32666. From amongst the persons qualified the Home Office would appoint an inspector nominated by the Board?—Yes.

32667. Upon that Board you have nobody representing the owners. I do not know whether you think it worth while?—Yes, the expert mining engineer.

32668. Is he to be nominated by the owners?—Certainly.

32669. You propose this Board should have the nomination?—Yes.

32670. That is the way the inspector should be appointed?—I think so.

32671. You suggest that this examination should take place in each district, that there should be a Board of Examiners for each inspector's district?—Yes.

32672. Would it be the same Board or a Board for every district?—A separate Board for every district.

32673. I suppose they would be paid for their services by the Government?—Yes.

32674. How frequently would they sit to hold these examinations?—Once or twice a year; not more.

32675. It would be no use whatever for a man to pass the examination unless he was also nominated by the Board?—I do not think so.

(*Chairman.*) He would have to take his chance of being nominated by the Board if he had become eligible.

32676. (*Mr. Ratcliffe Ellis.*) Supposing the Board found a number of persons very well qualified indeed, the Home Office are not to have the choice to pick whom they think to be the best man?—It is the same now. The Home Office has a list of persons qualified and they have to decide on one when there is a vacancy. I propose the Board should.

32677. You propose to take the power from the Home Office and place in the Board the power of appointing inspectors?—I think if the Board is fit to certify that any man is qualified, that they ought to be able to say which are the most qualified, which would be the first of the lot.

32678. Your view is to take away from the Home Office the power to appoint inspectors and place the appointment in this Board?—The nomination is practically the appointment.

32679. Not merely the nomination, but the appointment?—Yes.

32680. That is your scheme?—Yes.

32681. You have thought that carefully over?—Yes.

32682. Do you bring that as the view of your district?—I am on the executive.

32683. Of the miners in your district. You think that would be more conducive to safety than the present system?—I do.

32684. The next point you suggest is that these gentlemen when appointed inspectors must submit to an examination every seven years?—Every 10 years.

32685. By this Board, to see if they continue qualified?—Yes.

32686. If found to be disqualified they should retire on a pension?—With or without a pension.

32687. I understood you to say with a pension?—I should not object to it being with a pension.

32688. You think a good many would do their best to pass a second time?—I do, and I think it would do them good.

32689. That is the way you deal with them, every seven years?—Every 10 years.

32690. If there is any complaint against the inspector's capacity, is the same Board to deal with that or another Board?—No.

32691. Then you want another Board?—I do not say necessarily a Board, but some authority.

32692. What is the authority? First of all let us see what will happen. There must be some authority to which a workman can complain if he thinks the inspector is unfair or incompetent?—Yes.

32693. Any workman amongst the 800,000?—He would complain to the Board.

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32694. And then the Board must examine into this complaint and deal with the inspector ?—Yes.

32695. Either retire him with or without a pension or prosecute him, it may be ?—Yes.

32696. It depends upon what the complaint is ?—Yes.

32697. What is this authority to be ?—They first of all complain to the Board.

32698. What Board ?—The Board that appointed the inspector.

32699. The Examining Board ?—Yes. Probably the Examining Board would not feel competent to do more than inquire into this thing and want somebody else to decide for it. Who that is to be I have not thought out.

32700. Perhaps you would think it out and formulate this scheme properly, if you think it important ?—I do not mind.

32701. I understood you to say you wanted a further alteration with reference to Government inspection, and that is if an inspector found a dangerous practice in a mine that he was to call in two other inspectors from other districts, and if the three agreed that the practice was dangerous that then they might forthwith apply in the ordinary course of law for an injunction to stop that practice ?—Yes.

32702. You think that is preferable to the provision under Section 42 which authorises the inspector to prohibit the practice and leaving the owner to dispute the prohibition if he thinks fit, by going to arbitration ?—Much preferable.

32703. I suppose you know when applications are made for injunctions to the courts of law, the tribunal you favour, that it is a very usual thing to say that if the injunction is granted and it turns out not to be justified after, compensation must be paid to the person who suffers by the injunction ?—Yes.

32704. Would you also make that so ?—Yes, on condition that if the injunction was granted and it turned out to be right, the owners paid.

32705. What are the owners to pay ?—All the costs.

32706. Supposing the judge said: "Very well, I will grant an injunction," but this means stopping this pit ?—Yes.

32707. If it turns out that this is an unreasonable requirement on your part when the matter is further inquired into, you must pay compensation to the owner for what he has lost by this stoppage ?—Yes.

32708. Who is to pay that ?—The authority who appointed the inspector.

32709. The Board ?—The State, of course.

32710. The Government ?—Yes.

32711. The Government are to pay that compensation ?—Yes.

32712. Do you seriously put that forward ?—I have thought it out, and I will tell you why. I am very strong upon the use of safety lamps in a mine where there is any gas. Supposing the inspector says to an owner, "You should put lamps in that mine, because it is dangerous," and the owner says, "I will not put lamps in the mine"—that does happen sometimes—in that case the inspector would go to this court, whichever was the court he had to go to for an injunction, to stop that mine until the lamps were put in.

32713. Stop the working of the mine ?—Until the owner agreed to put lamps in. If the inspector could not justify that position he ought not to be an inspector.

32714. But the mischief has been done when the place is stopped whilst the arbitration is going on as to whether the owner is bound to put lamps, and——?—My objection to the present system is its slowness. If an inspector of mines sees that the pit is dangerous and that the men's lives are in danger, he ought to be able to order safety lamps to be put in at once. The owner may, if he thinks proper, dally that about for six months while the men are in danger. I propose in my system to settle that at once.

32715. I want to know who is to pay this compensation ?—The Government, of course.

32716. The damage done to the employer by having the pit stopped the Government must pay compensation for ?—If the inspector is wrong and it does not want lamps, and the owner is right, the Government pay compensation and deal with the inspector. If the owner is wrong and the inspector is right, the owner pays all the costs.

32717. To whom ?—All the costs of the proceedings.

32718. The Government would also have to pay, if the inspector was wrong, the men's wages during the time of enforced absence from work during the stoppage ?—Not necessarily.

32719. Who is to pay them ?—They give the men the ordinary notice to terminate.

32720. I understood there was to be an instanter injunction to stop work ?—I know sufficient to know if you were threatened with an injunction you would give notice, to protect yourself.

32721. He is to have notice, and be deprived of all compensation because his employment is terminated by an ordinary notice ?—You are taking me into a region into which I cannot follow you.

32722. If you make these suggestions you must see where they take you to ?—I would say even if the Government had to pay the men their wages in consequence of this stoppage, it ought to be done in the interests of safety.

32723. (*Chairman.*) Would it do to make the judge's decision on the injunction final ?—Yes, that would meet it.

(*Mr. Ratcliffe Ellis.*) No court would undertake to make a final injunction without hearing the evidence on both sides. You think it should give an *interim* injunction under terms that the Government should pay all the expenses. If the Government were willing to provide that, there would be no harm done, because the owner would be paid compensation if he succeeded. There would be no loss. How far the Goverment would fall in with a scheme of that kind I do not know.

(*Mr. Cunynghame.*) It would be a wage dispute.

(*Witness.*) I think I am misunderstood. There is no wages question in this.

(*Chairman.*) It is a question of safety. On a question of safety it ought to be decided at once, in order to protect the safety of the men.

32724. (*Mr. Ratcliffe Ellis.*) With reference to inspection under General Rule 4, have you any suggestions to make upon that except as to the competency of the inspector ? I will deal with that directly.—Nothing, except that a man appointed to be a fireman or examiner should perform that duty alone.

32725. A competent man I will come to. There is an inspection before the shift, and one inspection during the shift ?—Yes.

32726. The first inspection has to be reported ?—Yes.

32727. Do you think one inspection is sufficient during the shift ?—I do not.

32728. You have an observation to make upon that; you think there ought to be a second inspection during the shift ?—Yes, and reported.

32729. That is as to General Rule 4. It is no use providing that there should be an inspection either before the shift or during the shift unless it is done by a competent man ?—Certainly.

32730. The Act of Parliament provides it is to be done by a competent man ?—Yes.

32731. You think there are cases in which the men are not competent ?—Yes.

32732. Are those cases frequent in your district ?—I think they are frequent everywhere; that is my observation.

32733. In your district ?—Everywhere.

32734. It is rather a strong thing to say that throughout the country these men, upon whom you suggest, and I agree, a great responsibility depends for the safety of the men employed in the mines, are not competent ?—I may say a large number of them are not. That is, in my judgment. Observation leads me to make that remark.

32735. On what ground do you form that opinion, from the accidents, or some other reason ?—My chief ground for saying it is that I have observed these men at inquests in different parts of the country when they have given evidence about accidents. I have heard reports from men and I have conversed with those men, and on those grounds I have come to the conclusion that they were not as competent as they ought to be.

32736. How many of these officials are there in your district ?—Whatever is provided by the law and the Special Rules.

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32737. What number do you suppose there would be in your district?—There are some at every pit—according to the size of the pit.

32738. How many pits are there?—20 or 30 collieries.

32739. Not more?—No.

32740. Not more than 20 or 30 in the Bristol, Somerset and Monmouth district?—I only represent Somerset: I am not speaking of Bristol or Monmouthshire.

32741. You say in your judgment throughout the country there is incompetency amongst these examiners. What is your reason for that? You say you have conversed with a certain number of these officials at inquests, and from that and from your observation of their conduct at inquests you come to the conclusion that those particular persons are incompetent?—Yes.

32742. You blame the whole class. Will you give me the number of persons you have conversed with upon which you form this general opinion?—Hundreds in different districts and at odd times.

32743. Over what period does that extend?—Five or six years.

32744. You have conversed with hundreds of these people?—Yes.

32745. What particular thing is it that has satisfied you they are incompetent?—It is not only incompetency, but it is being over-burdened with work. I put the two together.

32746. Do you withdraw the suggestion you made, that in your view the great majority of the examiners through out the country are incompetent?—I do not say the majority: I said great numbers.

32747. Do you withdraw that statement, that a number are incompetent men?—No, I will not withdraw that: I believe it.

32748. I want to know why you come to that conclusion?—I have told you. I cannot add to it.

32749. You have come to that conclusion by conversing with men?—By their conduct at inquests, and from reports.

32750. From whom do you get reports?—From the workmen.

32751. You come to that conclusion through the conduct of the men at inquests, conversation, and reports from workmen?—Yes.

32752. Dealing with the last first of all, what is the nature of the incompetency the workmen complain of?—That men who do not know the full operations of mining are appointed as examiners.

32753. Have you had any particular complaint made against a particular man?—I will not ask for names.—I cannot give names.

32754. Do they give you a reason why they think this man is not competent?—Put it like this, hypothetically. If a haulier, or a man of that kind, was appointed to be an examiner, he would be thought to be incompetent because he had not been a practical coal miner.

32755. Your men complain, and you agree, that no man who is appointed to one of these posts, unless he has worked at the face, is fit to do the work?—Yes.

32756. Therefore on that ground you say a large number are incompetent?—Yes.

32757. The work these men have to do is the work of examination?—Yes.

32758. Do you consider a man who has worked at the face and has been five or six years at the face and had no experience in examining for gases, except in his own particular place, or in any other way of managing the mine, is a proper man to be put in this position?—He would be a better man than a man who had not that experience.

32759. You think whatever position a man has in a mine, unless he has worked as a collier he is not fit for those appointments? He could not tell whether the roof is safe if he has not been a practical collier.

32760. Does it follow that because a man has not worked at the face he cannot examine a roof?—He cannot tell whether it is safe or not.

32761. That is your view?—I am positive about it.

32762. That is why you say many of the present examiners are not qualified to do their work?—Yes.

32763. Not that you know whether they have made any mistakes or not?—I have seen mistakes.

32764. But because they have not worked at the face?—I know of cases in which men have made mistakes: I have come across them. Of course I have.

32765. Because a man makes a mistake does that absolutely disqualify him altogether?—Oh dear no.

32766. That is the reason you say a great number of these men are not competent?—Yes.

32767. The other point is that you say they have too much to do?—Yes.

32768 If they have too much to do that ought to be remedied: everybody would agree to that: and they ought to have sufficient time to make the inspection they have to make?—Yes.

32769. Do you think the owner of a mine ought to have anything to do with it?—Do you mean with the appointment of examiners?

32770. With the management of the mine.—He ought to manage it absolutely.

32771. If the manager is to be restricted so that he can only appoint a person who meets with the favour of the Miners' Federation, and only appoint from a limited class, is it fair to leave with him the responsibility for the mine?—You are putting into my mouth something I have not said.

32772. I am putting a supposition?—I do not agree with it at all. I would not consider for a moment any such dictation.

32773. If the owner and the management are to be responsible, should he not have a free hand in the appointment of his officials?—So long as he appoints persons who can keep workmen safe, and himself.

32774. Is he not the person to judge of that?—No.

32775. Who is to judge of it?—I think a man should show he is competent by passing a suitable examination. The man who holds the lives of other men in his hands and is supposed to know the place is safe, should show he is capable of doing the work.

32776. Amongst the managers in your district do you know any competent men?—Amongst the managers.

32777. Yes, the general managers of the colliery, the men who have the responsibility.—Will you tell me what you mean.

32778. Do you know anybody who is competent?—I know a man who started as a pit boy, and who has gone through all the grades, and is a first-class manager of a colliery.

32779. Unless it is the desire of the Managers to cause danger, what object should they have in appointing other than people they consider competent to do the work?—Some men like cheap labour, whether it is good or not.

32780. That is the only answer you have to give?—No, it is not the only answer. I think we are getting away from the point. My point is this, that the law requires that a competent person shall examine the mine. I want to ascertain in the cheapest, quickest and most effective way whether that man is competent or not. I object to the lives of men being in the hands of incompetent men. I want a competent man to examine the mines, and I think the only way to find out whether a man is a competent man is that he should be examined and hold a certificate.

32781. Do you know any colliery manager who does not want what you want, that the persons who are to examine these places should be competent?—I know lots of managers who prefer cheap men. They may think they are good, but they like them cheap.

32782. Do you know a colliery manager who would not wish to do what you wish to do, that is, to secure that the men who make these examinations are fully qualified?—I have no allegations to make against managers.

32783. (*Chairman.*) It is often the case that a person has a considerable interest in selecting the best men for a particular post, but at the same time he is by law often restricted in his choice. The Lord Chancellor is supposed to be the man who is responsible for the appointment of county court judges, and it might reasonably be supposed that he would be the man who would appoint the best men he could get, but we do not entirely trust the Lord Chancellor to appoint the best men as county court judges. We insist that a man who is appointed shall have seven years at the bar first, although the Lord Chancellor may think a man who has had two years at the bar is a better man.—Your Lordship has put my view better than I can put it myself.

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32784. (*Mr. Ratcliffe Ellis.*) With reference to discipline, after what Mr. Cunynghame has put before you as to what would be the result of your view, do you still say that discipline should be maintained only by prosecution?—I still say I am not in favour of fines being imposed by the management for breaches of discipline. One conviction on prosecution has a more salutary effect than 100 petty fines. That is what I said in my statement, and I still say that.

32785. Notwithstanding what Mr. Cunynghame has shown you would be the result you still think the same notwithstanding all the chaos which it would bring about?—I put my experience against Mr. Cunynghame's theory, and hold to my experience.

32786. You know a man cannot be fined against his will?—If you go to a man with a family and say, "There is the fine, or the prosecution, or the sack," and he has not much money, he is apt to choose the least evil to him, the fine, on purpose to keep his job, and pay the fine against his own convictions.

32787. You are inclined to choose the greater evil?—Let me put it again as shortly as I can. It is because I believe fines have the contrary effect to what is wanted, that they tend to laxity of discipline and not higher discipline, that I am opposed to them.

32788. Do you know that the men very frequently ask to be fined rather than prosecuted?—I have heard it said, but I have not met any of them.

32789. What is this employment of unskilled labour which you say conduces to danger?—I know instances where farm labourers are taken in the pit.

32790. To do what?—To work on inclines and roadways.

32791. To do repairs?—Yes.

32792. Is that extensive? Are there many cases where farm labourers are taken down the pits?—It is rather extensive in some districts where they cannot understand the language.

32793. We are not talking about the Poles, but about your own district. Is it largely in your district that agricultural labourers are taken down the pit?—Not very largely, but it ought to be prevented, I think.

32794. Is that the unskilled labour you complain of?—That is some of it.

32795. Have you had an opportunity of seeing whether accidents have resulted from the employment of the agricultural labourer?—No, I could not say I have.

32796. In your view do the majority of accidents happen down a pit from the unskilfulness of the workmen, or from the negligence and carelessness of the workmen?—That I could not say.

32797. You have no opinion upon it?—No.

32798. If a man is an unskilful man and commits an offence from want of skill, a mere suspension of a day or two would be no use there?—I would not employ him.

32799. You would dismiss that man, and if it was not safe to employ him at your pit it would not be safe to employ him anywhere else?—Yes.

32800. That man, notwithstanding he might have a wife and family, would lose his occupation of that character once and for all?—He may work on the land.

32801. So far as he is concerned he would not have another chance. The careless man—the manager is responsible for his carelessness, it may be—may be responsible, as you are aware?—He may be.

32802. Have you a right to dictate to the manager and say in what way he shall maintain discipline? Should you have a right to say "You must suspend this man for a couple of days" and still leave the manager responsible?—I do not want to dictate. I tell him that in my opinion the system of fining is wrong and foolish, and I have a right to do that.

32803. You think that he ought not to have a great amount of discretion as to how he is to maintain discipline, but only to suspend a man two or three days, and he is still to remain responsible for this man's carelessness when he comes back? Do you not think it is fair that if you are going to hold the manager responsible for the competency of the men under his charge, and for their carelessness, that you should give him a free hand as to the way he enforces discipline?—Up to a certain point. If I think his way of trying to maintain discipline has failed——

32804. And you think it has failed. You think fining has failed?—Yes.

32805. Now I want to ask you about the Special Rules. When you met together in Somerset to consider those rules, they were not established?—They were practically established.

32806. They were not legally established?—No, but practically.

32807. How do you mean "practically established"?—If the inspector had got to the point he wanted to get with the owners (that is the Home Office: the inspector is the Home Office for the time being in the matter of Special Rules) I put it to anybody it is not likely that a deputation of workmen is going to shift him.

32808. He had got the views of the owners?—And his own views.

32809. The inspector's own views?—Yes.

32810. Do you say he is not entitled individually or collectively to get the views of the owner without at the same time getting the views of the men?—I say if the workmen's intervention in making Special Rules is to be of any assistance or any good, they ought to be called in at the commencement instead of at the finish. That is all I say.

(*Mr. Cunynghame.*) The Witness said in this particular instance that Mr. Martin had pledged himself to agree with the owners before he heard the men's side. If that was so, I agree with him he should not pledge himself absolutely and I do not think he intended to do it. The Witness said he really had not much ground of complaint with regard to this.

32811. (*Mr. Ratcliffe Ellis.*) That was a suggestion from the Home Office?—Yes.

32812. Supposing the owner desires to propose a rule for safety, is he not to be allowed to propose the rule until he has consulted the workmen and ascertained that they agree to it?—I do not mean that. I will tell you what I mean. If an owner suggests a rule to an inspector——

32813. Or to the Home Office?—Yes, it is the same thing, practically. If there is a meeting between the owner and the inspector, if the men are to come in, they should come in at the first meeting.

32814. That is to say, the owner is not bound before he proposes a rule to call the men in?—Not at all.

32815. Then I think we agree. Then he proposes his rule and goes to the Home Office?—Yes.

32816. Then the Home Office must take care that every man is heard who has anything to say about it, before it is established?—That is what I mean.

32817. Now with regard to timbering, you have nothing to say upon that. In your district the collier does it, and does it satisfactorily?—Yes.

32818. And generally there is sufficient timber there?—Yes, generally.

32819. With regard to lamps, all you want to secure is that there shall be a proper lamp?—Yes.

32820. You gave an opinion that you did not think any lamp perfect. Do you not think it would be an advantage if there was a Government testing station established where lamps could be tested, the character of the lamp, so to speak, and they could give a certificate that certain lamps were sound and suitable, leaving persons who wish to take the opportunity of buying a good lamp as authenticated by them?—I think it is a good idea. They test explosives, and give permission to use them. I think the same thing ought to be done with lamps. ✓

32821. That would meet your view?—Yes.

32822. Upon the point of investigating after an accident, and the coroner's inquiry, a coroner has to inquire into the cause of death of a person. What do you find to be the difficulty in putting anything before the coroner at those inquiries, I mean pertinent to the object of the inquest?—I find none, personally. The coroner we have is most anxious to assist us, and gives us every opportunity.

32823. The only interest you have in a coroner's inquiry, I suppose, is to see that all the facts in connection with the accident come out so far as they are necessary to see how it can be remedied in future, if there is a mistake or a mishap of any kind. That is all your object is?—Yes.

32824. Supposing you find at a coroner's inquiry that all those facts have not come out, do you not think the provisions of Section 45 are sufficient to bring them out?

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Mr. S. H. Whitehouse.

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The coroner's verdict as it is is not material to your point. It does not make much difference to you whether the coroner says there was nobody to blame or somebody to blame, if the facts all come out. It is information you want, and not punishment.

32825. If you are of opinion that all the facts have not come out at the coroner's inquest as it is now, you can ask for that inquiry?—Yes.

32826. Is that sufficient?—I do not suggest anything else.

32827. You are satisfied with things as they are?—Yes, from that point of view.

32828. What else do you want at the coroner's inquiry?—The coroner may, if he thinks fit, decline to allow me in the court—I will not put it that way.

32829. Supposing he does?—I want that power taken away.

32830. Supposing he says that, have you not all the power you want under Section 45?—No. In the Act it says the persons named may be represented at the coroner's inquiry, subject to the order of the coroner. I want those words taken out of the Act, and workmen's representatives to have a perfect right in the court. I also want the coroner to have no right to hold a closed inquiry.

32831. You mean that there should be an alteration of the general law?—Yes.

32832. And not merely an alteration for miners' inquests?—I am only dealing with the mines. I mean that an alteration in the Mines Act would suit us.

32833. If it is of sufficient importance to alter it at all, it would have to be an alteration in favour of the general public?—I should not object to that. It would be all the better. I also want persons who are entitled to be at the coroner's court to be represented at the coroner's court, and I want them to have the power of viewing and to inspect the scene of the accident as soon after it has happened as possible.

32834. Who are the persons?—Relatives of the deceased, fellow-workmen and several others.

32835. I understood you to say it was a long time before the inspector visited the scene of the accident?—Yes, on account of the distance and that sort of thing.

32836. What is the longest time you have known?—I have known two or three days.

32837. Do yon not know it is the practice that matters are left exactly as they are until the inspector does come?—Nominally so. That is the letter of the law.

32838. I hope we all carry out the law to some extent. You understand that is the rule?—That is the letter of the law.

32839. (*Mr. Smillie.*) You are a member of the Executive of the Miners' Federation of Great Britain?—Yes.

32840. In giving evidence before this Commission to-day do you want to confine the opinions you give to the Somerset district, or do you speak to some extent also on behalf of the general body of the miners of this country?—I do not think I am entitled to speak on behalf of the Executive; I am not instructed so.

32841. Some of the views you have put forward to-day are not held by your colleagues on the Executive?—That is so.

32842. They are not held by a very large percentage of the miners of Great Britain?—That is so.

32843. With regard to the Special Rules, was that the amendment you mentioned the only one your workmen would have proposed?—No, if we had had an opportunity of discussing them when they were being framed, we should very likely have put more amendments. In the codification of these rules there were very few alterations from those framed when the 1887 Act came into force, so that it was not a very big matter. I am talking about the principle.

32844. You said you would have proposed in the event of the miners requiring to leave their places for want of timber, and because of the fact that the employer was responsible, that he should put in their pay for loss of time?—Yes.

32845. Mr. Cunynghame said the Home Office, if that had gone in, would have objected to it as *ultra vires*.

(*Mr. Cunynghame.*) You had better not take that; we should have to consider it. It might have been objected to.

(*Mr. Smillie.*) Is it not a fact that a mines inspector at one time did put that into one of your Special Rules and was very anxious to have it in, and that the mine owners would not have it?

(*Witness.*) That is so.

32846. You say the mines inspector may be taken to be the same as the Home Office?—Yes.

32847. It is a fact that the mines inspector, probably with the consent of the Home Office——

(*Mr. Cunynghame.*) Really you are putting a little more than the Witness knows. How can he know that the Home Office consented to the action of the inspector?—I should like to know the name of the inspector.

(*Mr. Smillie.*) You will hear in a moment. I suppose a mines inspector when he puts anything into a rule he is anxious to become a Special Rule, keeps the Home Office in touch.

(*Mr. Cunynghame.*) We will see when you give your instance. I asked the Witness whether he had communicated with the Home Office and he said "No," and he had no more complaint to make.

(*Mr. Smillie.*) Your view was not so much to penalise the employer, but you think that if the employer was responsible for the payment of the workmen he would make sure there was always a supply of timber?

(*Witness.*) That is my point.

32848. You felt that payment of wages for loss of time would very seldom arise?—Yes.

32849. It would secure a supply of timber and very often they have not that?—Yes.

32850. A mines inspector did really put this into a rule and fought very hard for it, but the mine owners refused?—I saw it in the draft Special Rules.

32851. (*Mr. Cunynghame.*) Who was the mines inspector?—It was the North Staffordshire district in 1887.

32852. (*Mr. Smillie.*) Will you give the name of the inspector?—I forget the name of the inspector. He is dead now.

32853. Was it in the printed draft of the rules?—Yes.

32854. That print may be in the Home Office?—I expect that print could be found.

32855. That was really the purpose of it. The inspector felt that would make sure that there would always be a supply of suitable timber, if the employer was held responsible for the loss of time?—Whatever his motive for putting it in was, he put it in and fought for it.

32856. Is it not rather a cruel system to put the responsibility on the workmen to withdraw if there is not a supply of timber?—I think so.

32857. Is it not very likely that they undertake very serious risk for want of timber, because they know that they must get their wages to live?—I think so.

32858. It may be for days they may work under dangerous conditions rather than lose the time?—I think so.

32859. Mr. Cunynghame put it to you that after all there was very little in this objection of yours about the codification of those Special Rules and the alteration of them, and you said there is very little in it. You meant very little in this particular thing, but not in the principle for which you contend?—I am very strong on the principle for which I contend. When I said "Very little," I meant there was very little about this recent business. If a new Mines Act is passed and Special Rules established as they were in 1887, I am strongly of opinion that the course I suggest ought to be carried out, and it ought to be provided for.

32860. (*Mr. Cunynghame.*) The men ought to have an ample opportunity of making their wishes felt before a decision is come to. I am sure you may take it that we agree with you?—Yes.

32861. (*Mr. Smillie.*) Supposing an employer desires to establish new Special Rules, at the present time you agree with Mr. Ellis that he should be entitled to propose those and send them to the Home Office?—Yes.

32862. Are you aware that the Miners' Federation of Great Britain is very strongly against that; that they have discussed the matter and are very strongly against it?—No; I was not aware of it.

32863. Who has the right to object; is it not the persons employed in a mine?—I should like to amplify what I said to Mr. Ellis. What I mean is this: it would be very wrong in my opinion to say that an owner of a

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mine should not be allowed to make suggestions as to a new Special Rule. I think an owner of a mine should be allowed, if he thinks fit, to make a suggestion as to a Special Rule, but if the Home Office accept that suggestion and it goes any further, I think that the Home Office should see that the workmen have as great an opportunity of discussing that rule they have to observe as the owner has after he has made the suggestion.

32864. (*Mr. Cunynghame.*) It would be very wrong if they have not. I should like to say that ?—Under the present system we have not. That is why I am talking about it.

32865. (*Mr. Smillie.*) Who do you think should be the most interested in Special Rules for safety underground ?—I think at all times, when the Special Rules have to be overhauled, the Home Office should be the authority to suggest Special Rules. I am talking now about rather an individual colliery owner who thinks he wants the rules as to timbering altered. I think he ought to be able to make a snggestion, but if a new Mines Act comes into force, I think the Home Office should be the persons to suggest the rules.

32866. Who do you think should be most deeply interested in the Special Rules for safety underground ?—The workmen themselves.

32867. Those who risk their lives ?—Certainly, the workmen themselves.

32868. Do you think the men should have power to initiate Special Rules for their own safety and send them to the Home Office ?—I think it would be desirable that they should.

32869. If you give the employer the right to do so would it not be fair and just to give the workmen the same right ?—I certainly would.

32870. Or, in the event of Special Rules being required for safety, I think your idea was that there should be a joint meeting ?—A joint committee.

32871. With the mines inspector who may be present ?—Yes.

32872. If possible, agreement on the Rules ?—That is my suggestion.

32873. There would be very little likelihood of the Home Office objecting to rules mutually agreed to between the employers and the workmen with the inspector there ?—None, I should think.

32874. Rules initiated and agreed to by that means would be more likely to be carried out than they are if the workmen have no voice in the making of them ?—If the inception of the Special Rules is part and parcel of the business of the men as well as the employers, they will endeavour to make workable rules, and after having made them will carry them out.

32875. There have been Special Rules which were barely workable. Some of those it is almost impossible to carry out ?—I think so.

32876. Sometimes timbering and spragging rules are impossible to carry out ?—I think so.

32877. Would it be possible at the present time for a wealthy colliery owner who may open up a mine in some part of the country with his own money, to appoint any person he thought fit as manager of that mine ?—Certainly, so long as the manager had a certificate.

32878. It is his own property ?—Certainly.

32879. Mr. Ellis suggested a person should be entitled to appoint any person he thought fit to look after his own property. You do not admit he could do that. The person he appointed must hold a qualified certificate ?—Certainly.

32880. Consequently, that owner is interfered with to the extent that he must appoint a person holding a certain certificate ?—Which the Board of Examiners have declared to be competent.

32881. And the manager of a mine, you think, should be no more entitled to appoint an examiner or a fireman who did not hold a certificate than an owner should be entitled to appoint a person to manage a mine ?—I hold that view very strongly.

32882. Are you of opinion that the safety of men underground depends to a greater extent on the competence and knowledge of the fireman than that of the general manager ?—Much greater.

32883. From the point of view of safety you think the examiners who examine every morning are of more importance than the manager ?—Much more importance.

32884. While you have not given individual cases, you are strongly of opinion that some persons are appointed for that purpose who are not fully qualified ?—I am fully of that opinion.

32885. I do not know whether you have gone the length of saying what qualification would be necessary. You put in practical knowledge as one of the first things necessary for a person to be appointed an examiner. Would a person holding a second-class certificate be sufficient ?—I think so. I happen to know that the examinations for under-managers are somewhat stiff, formal and catchy. I think some examination of that class would qualify.

32886. Are those Special Rules, so far as you know, carried out by the management at your mines ?—So far as really practicable they are.

32887. What about Rule 20. You have told us that the place mutually agreed upon where the timber is to be found is at the pit bank with you ?—Yes.

32888. Is that carrying out Rule 20 ?—We think it is.

32889. Is that a place as near a working place as is reasonably practicable ?—It is interpreted to mean that. My reply is that the system in force seems to me to be quite satisfactory.

32890. The men are quite satisfied with it ?—Yes.

32891. Do you really think it is carrying out that rule ?—I do not think it is literally.

32892. You are strongly against fining, because you believe it does not lead to discipline ?—Yes.

32893. It is put here that a workman himself would prefer being fined if he has committed any fault rather than going to Court. I think that is so ?—Yes.

32894. The majority of your men at the present time are of opinion that fines should not be inflicted but prosecution or dismissal should take place ?—That is so.

32895. I suppose you think in the eye of the law at least the workmen and the employer or owner should be placed on an equal footing ?—I do.

32896. If fining for an offence against the Act or the Special Rules is right and proper so far as the workmen is concerned, would it not be right and proper so far as the manager is concerned ?—Yes, but it is not provided for.

32897. Nobody would suggest putting it into the hands of the mines inspector to fine a manager for the breach of the Mines Act ?—I would not : I would like him prosecuted after warning.

32898. If it is wrong in the case of a manager, it must for the same reasons be wrong in the case of workmen ?—That is right.

32899. There are a considerable number of breaches of the Mines Act and the Special Rules at the present time ?—Yes.

32900. In many parts fines are imposed and prosecutions do not take place ?—Yes.

32901. Do you think the discipline is better (perhaps you cannot give us your experience in the matter) maintained where hundreds of fines are imposed rather than where there are a few prosecutions ?—I think it is much worse.

32902. Is the absence of prosecutions where no fines are in force a proof of the discipline of a mine ?—I take it so.

32903. That is your experience ?—That is my experience.

32904. Where there are no fines, but prosecution, the discipline is best ?—Yes, it is not because the breach is overlooked, but because the discipline is best.

32905. (*Mr. Cunynghame.*) Your objection to fines is a very general one ?—Very general.

32906. On all occasions ?—On all occasions.

32907. By anybody ?—By anybody.

32908. We have got it in evidence that one of the rules of the St. Helen Association of Colliery Enginemen says a member who teaches anyone the business of an engineman unless he is his son, or his brother-in-law or the son of another member of the Association, will be fined not more than 40s. Do you approve of that action in fining by that body ?—Probably if I were an engineman in Lancashire I should know more about it. I do not know anything about it. I do not approve of the principle of fining.

32909. Would your condemnation of the system induce you to condemn that rule ?—I do not approve of the principle of fining for breaches of discipline.

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Mr. S. H. Whitehouse.

5 Dec., 1907.

32910 Therefore *prima facie* you think that a bad and undesirable rule ?—I do not know sufficient of the circumstances to be able to give an answer.

32911. (*Mr. F. L. Davis.*) Are you working in the mine now ?—No.

32912. How long is it since you worked ?—20 years since I worked continuously. I frequently go into the mine now.

32913. You told us that you made inspections ?—I frequently go into the mines now.

32914. Are you in favour of Rule 38 as to workmen's inspections ? Are you in favour of a workman from another colliery being appointed to examine for the workmen ?—I think an occasional examination of the kind would be good.

32915. You understand my question ?—Quite.

32916. Not one of the workmen, but somebody from another colliery ?—I think it would do good if it could be accomplished easily, but my view is if that kind of inspection is to be of any service it must be conducted by a man who is not working in any mine.

32917. You think it would be a good thing for a stranger to occasionally examine ?—Yes.

32918. Do you think as a matter of fairness that a man should be under certain restrictions if he did make an inspection, similar restrictions to what the inspectors are at the present time under as to keeping everything confidential ?—He has to sign the report book if he makes an inspection. He cannot keep it confidential if he signs the report book.

32919. The report would be put in the book. I agree as to that, but I mean that he should not use any information he gets during his examination in that particular colliery to the detriment of the owner or for the purposes of the workmen ?—Do you mean about the system of work ?

32920. I do not mean anything in connection with his inspection, but anything that comes before him outside that ?—I think if a man was allowed into a mine to make an inspection in the interests of safety, that is all he ought to do.

32921. He ought to make his inspection under certain restrictions ?—Certainly.

32922. I see you are very much in favour of discipline in your district ?—Yes.

32923. Do you do anything yourself personally to impress on the men the necessity for observing all the rules and regulations and looking after their own safety ?—All I can do, and I go so far as to refuse to help a man who persistently breaks the rules.

32924. How do you do it ?—I tell them at meetings, and every opportunity I have I take of preaching that it is in the interest of everybody that men should obey and carry out the rules for the purpose of preserving discipline.

32925. Do other officials of the Federation do the same in your district ?—Generally, I think.

32926. (*Dr. Haldane.*) Are there any arrangements in your district by which the men are enabled to clean themselves up before they leave the pit ?—No.

32927. You have heard of such arrangements ?—I have seen them in Belgium and other places.

32928. Have you ever considered whether it would be desirable or not to have them in this country ?—I do not think it would in my district.

32929. Why not ?—The men in my district are a cleanly lot of people. They live close to the pits, and as soon as they get home they wash. I do not think the advantage to be gained would be worth the expense of putting up and the maintenance of these wash-houses. I may be wrong, but that is my view.

32930. Are there facilities for washing in their own houses ?—Yes.

32931. You think they have plenty of room ?—Yes.

32932. A man coming home from work brings a lot of coal dust with him, and that is apt to get about a house and cause a great deal of disorder and inconvenience in the house ?—In a great many of our modern cottages we have bathrooms.

32933. Are they used ?—Yes, our colliers wash all over every day.

32934. You think that is so ?—I know it is so, I often see it.

32935. Are there districts where that is not so in Great Britain ?—Ours are very cleanly. As soon as they come home they get a wash all over every day. That is the general rule. If a man lives in a small cottage, he gets into the smallest part of the lower part of the house, and the others go into another room, and he gets a good tub.

32936. You think every man gets a good wash ?—A good tub every day.

32937. In that case you consider that there would be no very great advantage is having washing arrangements at the pit-head ?—I do not think so.

32938. Are there any sanitary conveniences underground you know of in your district ? Would you think there is any need for anything of the sort ?—There are such arrangements as the Children of Israel had in the Desert.

32939. That is no arrangements ?—Yes, they make a hole. Really I do not think there is any need for them. I suppose you put the question with regard to this worm disease.

32940. Yes. I do not think there is much bother with it in your district, because the pits are cool ?— I think the temperature would not produce those things.

32941. As a rule, I quite agree, but still there are other diseases propagated in the same way, occasionally typhoid fever is spread from want of such things. From your observation, do you think there is any need for arrangements of that sort in your district ?—Not very long ago we had a man I thought might be suffering from the worm disease, and we had him thoroughly examined, but there was no trace of it at all.

32942. You have not observed any nuisance such as a bad smell or that kind of thing underground ?—No.

32943. You think the men are careful to cover up the excrement ?—They put it back in the gob.

32944. If that is done it is a very satisfactory plan ?—I think so.

32945. I only wanted to know whether you have observed that nuisance arose from the want of conveniences. —I do not think so. If there was any necessity for those things I should be very strongly in favour of them. I am very strongly in favour of it in mines where the temperature is high and moist, and likely to produce these conditions, but I do not think there is any necessity for it with us.

32946. You think the men can always use the gob or some place where the material can be buried ?—Yes.

32947. Have you heard many complaints of bad ventilation in your district ?—No, not generally. When the airways get a long distance occasionally we get temporary complaints, but we get very good natural ventilation, and if it is not enough we put in a fan. There are no complaints at all as a rule.

32948. Some mines I have heard of have a good deal of black damp in your district ?—Somerset.

32949. Yes.—We do not have it now. The mines are fairly well ventilated, quite up to the average of the district.

(*Dr. Haldane.*) I do not know them myself, and so I am putting the question.

32950. (*Chairman.*) How far do the men have to go home ? What is the furthest distance from the pit-mouth ?—In some cases two or three miles, but generally speaking not far.

32951. Then if it was wet they would have to go in their dirty clothes two or three miles before they got home to wash ?—Yes.

32952. (*Dr. Haldane.*) They are not usually wet through from sweat ?—No, our pits are dry and they have a low temperature. Some are hot when we get down lower and further out.

32953. (*Chairman.*) Is there anything more you would like to say ?—No, I do not think so.

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Mr. WILLIAM LATHAM, called and examined.

32954. (*Chairman.*) You are a miners' agent in Shropshire ?—Yes.

32955. You come here to speak on behalf of the miners in your district ?—Yes.

32956. Have they deputed you to come here ?—Yes.

32957. What steps have you taken to ascertain their views ?—From time to time we have discussed these mining questions in the form of the new Mines Bill.

32958. You have had a new Mines Bill before you ?—In conjunction with the Miners' Federation.

32959. The Miners' Federation have placed before you a draft Bill ?—Yes.

32960. Which they would like introduced into Parliament, and you have discussed this draft ?—Yes.

32961. The points upon which you are going to give evidence are points which have been freely discussed between you and the other miners in the district ?—That is so, by our executive.

32962. First of all you wish to speak as to the insufficiency of Government inspection: what is your view as to that ?—I have worked in a colliery myself about 37 years, and I think I have seen the inspector three times in that time. If I may speak from experience I could not say to my knowledge that it is usual to make an inspection only when a fatal accident or an accident in a very bad way takes place, but then he comes into the district.

32963. It must be clear that he comes sometimes into the district not for the purpose of investigating an accident, because I think you will find that all the inspectors visit all the pits in their district once every year ?—Yes.

32964. Either the inspector or the assistant inspector. They do not necessarily go all through the pits, but they go down ?—Yes.

32965. That is so, I suppose ?—That is so. We think they should go through the pit. It is not probable that they go into the worst places where they are required.

32966. You think they should go all through the pit when they make an inspection ?—Yes. We think it should be an inspection like that, and we have been in favour of working-men inspectors.

32967. That is another matter. First of all I am on the sufficiency of inspection. How often do you think the mine ought to be inspected in the course of the year if it is thoroughly inspected ?—A good many things may happen in three months.

32968. Do you say four times a year would be a reasonable number of times for every pit to be thoroughly inspected ?—I should say so.

32969. Every pit ought to be reasonably inspected every three months. How many officials would be necessary in your district ?—We are joined on with our Shropshire district, which is many miles from North Staffordshire.

32970. You and North Staffordshire are one district ?—Yes, and there was a time when a portion of Scotland was added on to it.

32971. Taking the whole of your district as it stands at present, how many inspectors would it be desirable to have to go through the pits four times a year ?—In our county there are not more than 3,000 men employed.

32972. You only speak for your own county ?—Yes.

32973. How may men would be required to go down all the pits four times a year in your county ?—Not more than one.

32974. Would one do ? It would take the whole time of one man ?—Yes. By the time he had made special visits and in any case of accident, fill up his time in that way.

32975. You think that one man to about 3,000 miners underground is the proportion you would suggest, or 3,000 employed over-ground and underground ?—I do not know that we have taken it in that way of computation.

32976. What is your way of computation ?—We have thought being a long distance away from Staffordshire perhaps that has something to do with there not being many inspections taking place.

32977. Would you be in favour of re-arranging the district, so as to make a district of at least 5,000 men employed in the mines ?—Yes, or that in the present districts there should be workmen inspectors subject to the control of the present Government inspectors.

32978. That is a different point. How big a district do you think one inspector can visit four times a year in the way you think mines ought to be visited ?—I should think if two or three inspectors were added to, say, what now seems to us to be a big district, that would meet the case.

32979. There are an inspector and two assistant inspectors ?—Yes.

32980. You think three men would do it. Six for the whole district would be enough ?—Yes.

32981. Supposing the districts were arranged in such a way that they would not have so much travelling to do as at present ?—We think that would be much better.

32982. You would divide the district into six separate districts, and put one man at the head of each district ?—Yes.

32983. Would you have the same class at the head of every district, or the chief inspector at the head of the five or six ?—We think we ought to have what we have said, working-men inspectors, because they are more accustomed to get round a mine.

32984. One chief inspector and five working-men inspectors or assistant inspectors, as you have now. Do you mean three classes, or two ?—We favour three classes.

32985. You would like to have for your district one chief inspector and two inspectors as there are now, and three working-men inspectors ?—Yes.

32986. These working-men inspectors would have to be at the head of the three districts ?—For the purpose of periodically visiting the district other than when fatal accidents occur.

32987. You would make this distinction between your working-class inspectors and the present chief inspector and assistant inspectors, that it should be the duty of the chief inspector and the assistant inspectors chiefly to examine into causes of accidents ?—Yes.

32988. But as regards mere inspection underground apart from accident inquiries, you would have that done mostly by working-men inspectors ?—Yes.

32989. If the chief inspector and the assistant inspector had time to spare after they had done their duties as regards accidents, they probably would, in their districts, go underground ?—Yes.

32990. Would you not have a difficulty: you would have three districts and the inspectors of each would be principally engaged, or to a great extent engaged, in looking after accidents, and another three districts where there were a different class of inspectors employed who would not be empowered to inquire into accidents at all, but whose only duty would be to go down the mine—you would have three districts, consequently where apparently the inspectors would have very much less to do than in the other three districts ?—We are told now that the chief inspector's time is taken up with clerical work and attention to accidents, and that there is no time for them to make these periodical inspections, say, more than once a year, and that is why we suggest that there should be more working-men inspectors who would go thoroughly through the mine when it was inspected.

32991. You also said the whole of the district should be divided into six. I do not understand how you manage that. The three districts that were assigned to the chief inspector and the two assistant inspectors would have to be very much smaller than the other three districts, because the chief inspector and the assistant inspectors would have other work to do besides going down the mines inspecting ?—Did we not rather set out that we should have the present chief inspectors and the other staff to work under them ?

32992. I thought you said you would have three classes—the chief inspector, two assistant inspectors and the working-men inspectors. I understood you to further say that it should be the exclusive duty of the chief inspector and the assistant inspectors to inquire into accidents ?—Yes.

32993. That should be their primary duty, and if they had time they might go down the mines also, but the other three working-men inspectors should have absolutely nothing to do but go down the mines and report to their chief inspectors ?—Yes.

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Mr. W. Latham.

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32994. If the inspector and the two assistant inspectors had work to do that is not done by the other three inspectors, it is impossible to suppose that they can look after such large districts as the working-men inspectors in the way of going down the mines?—That part of their work with additional inspectors would be helped materially.

32995. I do not understand your saying your district ought to be divided into six water-tight compartments, as I may call them, and that as regards inspection, each inspector should have one-sixth of the district to inspect. It seems to me that will not work, according to your theory, because the chief inspector will have a great deal of work to do, and his two assistant inspectors, which you do not throw on the working-men inspectors, consequently it is impossible that they can have the same size districts as the working-men inspectors?—We think they would work in conjunction with the assistant inspectors and thus give better supervision of the mines.

32996. I do not understand. You propose to divide your district into six. If you do that and divide it into six equal parts, it is impossible to suppose the parts looked after by the chief inspector and the assistant inspector can be as well inspected as regards underground inspections as the other three divisions. I suggest if you throw upon the working-class inspectors' less work than you put on the other two classes, the other two classes cannot inspect such a large district as the other three?—We think if they gave these periodical visits of once a quarter that that would find them work to do that is not done at present.

32997. You do not see what I am driving at. I think probably you have not thought it out. You tell me you want to divide your district into six more or less equal parts?—Six districts.

32998. Are they equal in size?—Yes.

32999. Then, as I understand it, each of these six inspectors, whether working-men inspectors or a different class of inspector, would be responsible for underground inspection of all the mines in that particular one-sixth part of the district?—Yes.

33000. If that is so it seems to me that the districts under the chief inspector and the two assistant inspectors ought to be very much smaller than the three districts under the working-men inspectors. Do you follow that?—Because they would have to make more visits.

33001. Because the working-men inspectors have nothing to do except visit the mine and report to their superiors, whereas the other inspectors would have a different class of work to do, very important work, which would take up their time inquiring into accidents. Therefore, the persons who have cast upon them not only the duty of inspecting underground mines under ordinary circumstances, but of investigating the causes of accidents, would have very much more to do if their district was equally large than the working-men inspectors who have only to inspect?—We thought if the district was divided and these men put to work, that an easy solution by arrangement would be found, and we should have a much better inspection than at present.

33002. You want to divide the district into small portions so that no inspector shall have occasion, except in the case of serious accident, when the chief inspector would probably have to inspect not only his own district but the other five districts wherever there was an accident—except in that case you would divide the district into six equal parts, so that no inspector should have far to travel when he had to go down the mine?—That has been our thought.

33003. That is your idea?—Yes.

33004. I still do not understand how you would work six equal districts if you give the mines inspectors different duties from the others—much more varied duties than the others. The chief inspector and the assistant inspectors would not only have to inspect the mines in their own district, but for investigating accidents the whole district would be thrown into one, and the chief inspector would go over the whole district to inquire into a very serious accident, so that the chief inspector of the district would have an enormous amount of work cast upon him which is not cast upon the other three working-men inspectors?—We do not take it that there are so many fatal accidents to be inquired into at present.

33005. You think it would not make much difference to the power of an inspector to inspect underground whether he also had cast upon him the duty of inquiring into accidents. You think that takes up so little time that it need not be taken into account. Is that your idea?—I could not say that we belittle the question of inquiring, but we think at present there is room for more visits at the collieries than we have at this time.

33006. You think it is desirable that districts should be divided up so that no man engaged in the inspection of mines should have far to travel to visit his mine?—That has been held as a real difficulty in taking the time of the people who are to make these inspections.

33007. With regard to the inspection of mines by the men, you say it has not yet taken place in your county to your knowledge, but has been discussed many a time. Has there been no inspection under Rule 38 in your mines?—No. I have been acting secretary for something like 20 years and agent within a few months, but I have never known an inspection made by the workmen, but many a time when things have been in very bad form it has come up at our meetings and we have discussed it. Things have changed somewhat in that respect. Our county at one time was laregly worked by the butty system, that is, you understand, by contractors. Then we had very great difficulty, that is happily changed and very much for the better. Now the companies work it themselves and are wholly responsible.

33008. Do you mean to say there is no mine in your district where you are not afraid that the mine-owner or manager would discharge a man who gave an unfavourable and true account of the condition of the mine?—When it has come up to freezing point many men have found lots of ways of getting out of the difficulty, and have been afraid.

33009. The men have almost agreed to go down under Rule 38, and at the last moment hung back and said they were afraid to do it because they might get into trouble with the owner or manager?—When a meeting has been called and it has been discussed and the facts laid before it, and we have selected our deputation of men, we have found the men have not felt that they could take their bread and cheese and pursue that course. In fact, we have never had an examination.

33010. If you have never had an examination, what makes you think that the men would be treated badly or suffer for it in some manner if they gave an unfavourable account of the mine?—I have known in several cases where it has been supposed that anonymous letters have been sent to the inspector of mines, and that whether right or wrong some men have had to pay the penalty; that is, there has been suspicion laid.

33011. That they were the persons who wrote the anonymous letters?—Yes; because they were making a big noise at miners' meetings they have had to suffer.

33012. Perhaps they were sent away not because they were supposed to write the anonymous letters, but because of the noise they were making at the miners' meetings?—No. The inspector came after, say, what we would suppose was the information given. Men have been very timid in that respect, so that we have never had an examination under that rule.

33013. They have been very timid, and the reason for the timidity is that——?—Somebody would be spotted out.

33014. The reason they give is that they think they have noticed that persons who are supposed by the management to have written anonymous letters complaining of the mine have had their livelihood taken away from them?—Yes.

33015. They have been dismissed?—Yes.

33016. That is your view, at all events?—Yes.

33017. With regard to inspection by officials, you say that officials are too much engaged in looking after the output and not safety, and that they should not be responsible for the output. You agree with most of the other witnesses on behalf of the men who have come before us, that the firemen's duties ought to be confined entirely to looking after the safety of the men, and they ought not to be concerned in looking after the output of the mine?—Simply on the ground I just stated, that when the contractor had it the firemen and under-manager were solely set aside for that purpose, but in the change these men are rather pushed to increase the output and to cheapen it. We think they should be responsible, and that the safety of life and limb should be their sole business.

33018. Supposing it was their sole business, do you think they have too large districts? Supposing that other duties were taken away and your suggestion acted upon, do you think they would then be able to go through their districts properly?—Of course it is already understood our district or county is not composed of very big collieries.

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33019. You complain that they have too far to travel. How could that be avoided? You mean the districts are in some cases so large they cannot get through the gates and airways in the course of their inspection?—The time is largely taken up in seeing to the moving of the coal to the pit-bottom.

33020. If their time was not taken up in that way you think they could get round?—Yes.

33021. And visit the airways and do what they ought to do?—Yes.

33022. With regard to the question of discipline, you favour prosecution rather than fines. Men, you say, do not like police courts, but although the men themselves might be in favour of the system of fines rather than being taken always before the police court, your executive have come to the conclusion in the interests of safety, whether the men like it or not they ought to be taken before the police court, and not have the option of agreeing to a fine?—We have always supported that, and when we have had people come before us objecting to fines and wanting to get out of them, of course they have to agree to it themselves, and then they think if they do not agree, there is the other course of dismissal. We rather think that the colliery management should take them into the police court.

33023. Do you think the fear of being taken into the police court would improve the discipline so that it would not be necessary to have a great many prosecutions?—I think so.

33024. That is your view, at all events?—Yes.

33025. As regards Special Rules, men should have a voice in establishing the rules. What do you mean by "establishing the rules"?—When Special Rules are made, and I am thinking now of our own Special Rules, we have had no part in them, and have found some things which have been studiously left outside. If I might express one, we found at a colliery the mealtime of boys had never been recognised underground. They had to take their food whenever they could. The horses were never put in the stables and that kind of thing, and we appealed against it, and took the Special Rules——

33026. You suggested certain Special Rules to deal with the point?—When we took the Special Rules for the county we found that while they applied under the Factory Act to boys, it was not intended that it should apply to boys underground. I only point that out as one thing; there may be others.

33027. Mr. Ellis has pointed out to me in Subsection 7 of Section 7, the Coal Mines Act of 1887, the principal Act, there is a provision: "No boy, girl, or woman shall be employed continuously for more than five hours, without an interval of at least half an hour for a meal, nor for more than eight hours on any one day, without an interval or intervals for meals amounting altogether to not less than one hour and a half." Is that satisfactory, or would you have a Special Rule making that stronger?—I should have the word inserted "underground."

33028. It is no man shall be employed; that is above ground and underground?—It was pointed out to us that it did not apply to underground.

(*Mr. Smillie.*) It is with regard to the employment above ground.

(*Chairman.*) That seems extraordinary.

(*Mr. Ratcliffe Ellis.*) I was under the impression it was about the mine.

33029. (*Chairman.*) That is your point; you wanted Special Rules to deal with that objection to the Act of Parliament?—We thought if we had been there when these Special Rules were made we should have had some voice, and have thought the boys underground should have the same treatment as boys on the surface.

33030. Did you point that out to the mine-owners?—Yes, the mine-owners agreed, and the boys. In the last century they did not have it.

33031. What do you mean by that?—It has never been in that colliery. The boys never had a mealtime underground until 18 months ago, after this thing was established. They have mealtime underground now.

33032. Eighteen months ago you got your way. For a long time you tried to get the Special Rule altered so as to ensure the boys working underground getting the same protection afforded them as when working above ground, and you were not able to do it?—This was the colliery, and they conceded our request and established a mealtime.

33033. What have you to complain of if they acceded to your request?—We were only pointing out that in making Special Rules men should have a voice.

33034. (*Mr. Smillie.*) Is it incorporated within the rules or is it a mutual agreement?—No.

33035. (*Chairman.*) Is it a special arrangement, or is it incorporated in the Special Rules?

(*Mr. Smillie.*) It can be taken away at any time. It in a mutual agreement.

(*Witness.*) Yes.

33036. (*Chairman.*) The Special Rules say nothing about it?—No.

33037. When did you first suggest that the Special Rule should say something about it?—When I found it out.

33038. When was that?—2½ years ago.

33039. About a year after that a special arrangement was come to?—Yes.

33040. The rules were not altered, but a special arrangement was come to?—Yes.

33041. You want now that the rule should be altered?—We point out when Special Rules are made that the men should have some voice in them.

33042. What do you mean by "have some voice?" Before they are printed and promulgated by the mine owners, that there should be some preliminary conference between the mine owners and the men as to the kind of rules that would be desirable?—That is so.

33043. Before the owners had pledged themselves to a course of action, they should meet the men in conference. That is your idea?—Yes.

33044. With regard to accidents, you favour systematic timbering. What do you understand by "systematic timbering?"—I do not know how it prevails in other counties, but if it does not look dangerous, you see winding going on.

33045. You mean to say there ought to be some definite rule that timber should be placed on the ground a certain distance apart even though the roof may not look dangerous. That is your point?—Yes.

33046. "After a fall, winding should be suspended until properly set."

(*Mr. Smillie.*) After a fall in a roadway no further work should go on underneath that place until that is properly set and arranged.

(*Witness.*) It is the custom to get out the debris or rock or whatever it is, and make shift. We have known lads travelling under them meet with very ugly accidents.

33047. The management have not thought it necessary the instant a fall takes place to prop up the roof?—That is right.

33048. You think they ought to suspend the haulage until the roof is propped. They put the stone on one side and go on with the haulage and do not prop up the roof at once. That is it?—Yes.

33049. For accidents of this kind unskilled workmen are largely responsible for. Then the management sometimes put men to work at the face where they naturally would have to set timbers to protect themselves, who do not know their duties?—We think in these later years that men have been put in charge of stalls, and so on, who have at least not had any experience, and we have thought that this kind of thing has led to a good many accidents, because we have taken the skilled men, as we call them, and with the skilled men the accidents are materially depreciated.

33050. (*Chairman.*) I should like to have some statistics about that, if you have any, with regard to the men. You divide the stallmen into two classes, in your opinion, unskilled and skilled, and then take out the accidents in stalls where skilled men are in charge, and the accidents in stalls where unskilled men are in charge, and you find the rate is higher when unskilled men are in charge?—We have not been able to get a definite arrangement of selection.

33051. I thought you had divided them?—No, we have made observation of unskilled men largely by our Friendly Societies. Those on the accident fund come from a class of people who have not had a proper training and are not what we call skilled men.

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Mr. W. Latham.

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33052. You find in your provident societies men come for money owing to accidents having happened, and your experience is that the greater part of these men who come upon your fund are men who are not skilled?—Yes, we think men who have served other trades and callings and get into the colliery late in life should be excluded, or that there should be some age limit as to when a man should not come into the pit. Anyway, we think unskilled workmen largely add to the danger of themselves and other people.

33053. You believe that the statistics of friendly societies bear it out. When you inquire into the class of men who come on the society in respect of accidents underground your experience is that the greater part are unskilled?—Yes, and it is the same class of people from time to time.

33054. With regard to the haulage it is not very much in vogue in your mines?—In hauling we take it with mechanical apparatus.

33055. It is all horse haulage with you?—Yes.

33056. Have you anything to say about the danger of horse haulage?—We do not know whether it may come in with that question. You will soon tell us if it does not. We have thought with the horses travelling, the boys, the dust, and that kind of thing, that a better system of watering in the mines may assist the haulage. That is not a question of safety of life or limb so far as the roof is concerned, but it is very necessary.

33057. Would you have the coal sprayed?—Yes.

33058. As it goes along?—Have the roads sprayed to lay the dust as it goes along the haulage roads.

33059. You do that, not on account of the safety of the miners, but merely because it is pleasanter not to have dust in the mine?—We think it is injurious to the men travelling.

33060. Injurious to health?—Yes.

33061. You do not suggest that it is a cause of explosions?—No.

33062. With regard to shaft accidents, you say that men should not be allowed to ride on two decks. Why not, if there are two decks to the cage?—I am speaking now for our county, but we have had one or two accidents. In October, I think, we had this second deck business. We have always come down on one deck and the men always object to it.

33063. The men object to the two decks?—Yes.

33064. Why do they object?—I do not think anybody likes it, only you get hardened to it.

33065. Is not one deck the same as the other?—In raising and lowering men to the pit bottom and top with two decks we think it is susceptible to too many difficulties.

33066. What difficulties?—I have been in the sump myself.

33067. The cage is too heavy?—No, you take it to the pit bottom when one deck has got off and that has to go down into the sump and the other to get off. I am speaking from experience.

33068. You got a ducking on one occasion?—Yes.

33069. Owing to there being two decks?—Yes; men in our county have not been accustomed to it, and possibly they must get hardened to it. I know they do have it in other counties.

33070. (*Mr. Smillie.*) Do they load both decks at the same bottom?—Yes.

33071. They have not two bottoms for loading the decks?—No.

33072. If men are on the top deck and both decks go down the lower deck is in the sump?—Yes.

(*Mr. Smillie.*) In some mines they load at different places.

33073. (*Chairman.*) With regard to the safety catches and detaching hooks, do you approve of safety catches and think that they ought to be in use?—Yes.

33074. Have you had any experience with safety catches in your mine. Are they used?—No. We have one or two pits where, owing to certain regulations, we have had detaching hooks.

33075. Safety catches is a different matter altogether. Do you know anything about safety catches? Have you seen any catches in action?—Several, as an experiment.

33076. You have seen experiments?—Yes.

33077. That has convinced you it would be a good thing to have safety catches?—Yes; I am of opinion that it is the only place in mining where a man is not under his own control. If he is down the pit he can timber, but when solely on the end of the rope he is in the hands of somebody else, and the very best thing should be done.

33078. The safety catches do not act through the miner: they are automatic?—He cannot put them into operation himself. We say that, but if there is anything that can add to the safety it should be provided.

33079. However, you have had no personal experience so that I will not ask you any more questions about them. The detaching hooks are to prevent overwinding?—Yes.

33080. You have detaching hooks in your mine?—Yes.

33081. They work all right?—Yes.

33082. You have nothing to complain of?—No; in one or two instances it has saved the cage going over the top.

33083. Therefore, you think they ought to be made compulsory?—Where the men are raised and lowered by mechanical means.

33084. You think they ought to be made compulsory?—Yes.

33085. With regard to investigation into mining accidents, you ask for an immediate inquiry after accidents, and you complain that the inspector does not come quickly enough?—We think if a day or two passes, as we have known it, that many things can be re-arranged, and we think that the inspector should see it immediately it takes place.

33086. You have some suspicions of the management in those cases, although it is clear that the scene of the accident ought to be left exactly as it was until the inspector comes down. You think that is not always the case?—It is beyond thinking.

33087. You know it is not always the case?—Yes, I have seen timber sent down.

33088. After an accident?—Yes.

33089. How would you deal with that?—We think that these people may do it for certain purposes but if found out there is the word "prosecution."

33090. How would you make the inquiry more immediate. How would you insist on the mines inspector coming down within two days if he could not get there in less time?—It is suggested by a better system of inspection.

33091. You would make the districts very much smaller so that the inspector might be much nearer his district?—Yes.

33092. At the same time you have told me you would not allow the working miner in the third class to investigate an accident. Would you allow them to go down and perhaps remain in the pit for some time until the assistant inspector or the chief inspector came to see fair play? Would you suggest that?—Yes.

33093. With regard to the coroner's jury, juries you say should consist so far as possible of practical miners. "In our district miners are studiously avoided—get shopkeepers, etc., who have no knowledge of mining or mining terms." How is that? I understand juries are generally got together by a policeman?—Yes.

33094. Do you think the policeman has instructions from the mine-owners that he is to carefully avoid anybody who knows anything about mining?—I have been asked to serve on a good many inquiries myself, but in the long years I have been in our district nobody has asked me to serve on a coroner's jury.

33095. You are very much obliged to the constable?—No.

33096. You think it would be your duty to serve on a coroner's jury?—It is not my opinion, but the common opinion of the pitmen that because they know too much, or may make too many inquiries, they are studiously avoided.

33097. Do you think it results in these inquests being scamped in many cases? The coroner's jury not being practical miners results, you think, in the inquiry not getting out the full facts of the case?—I could not express that determined opinion, but from my knowledge of what has taken place, the people concerned have not had a thorough knowledge of what they are inquiring into, say farmers, or that class of people.

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33098. How would you proceed to remedy that state of things? What do you suggest should be done?—We rather suggest that they should get miners there so far as possible.

33099. How are you going to ensure that miners should be asked to be on the jury? Who should be the person to get the jury together, for instance? Who should go round and ask the persons to serve on the jury? Ought it to be the constable, or some other person, say a fireman, or somebody in that position?—A fireman.

33100. A minor official of the mine, like a fireman, who is responsible.—It is very probable that he would be even worse than a constable.

33101. (*Mr. Smillie.*) He would not call a miner?—No.

33102. (*Chairman.*) Of course not, if his conduct was impugned. Who would you have to select the jury?—Have you thought about it at all?—No, I should not care for my part to select the jury.

33103. It is a difficulty?—We think that if all the facts of the case had been brought out it might have led to greater care being taken in the future.

33104. Do you suggest that a provision should be put in the Act of Parliament to say that in case of a fatal accident underground in a coal mine that the coroner's jury should be composed exclusively of practical miners?—Not exclusively.

33105. Only some proportion, say a half. Would you say that half the coroner's jury should be miners, and have that put into the Act of Parliament?—We think that something should be done in this respect, because it is studiously avoided not only in our district, but in others, I believe, and we call attention to it.

33106. You have not thought the matter out as to what should be done, but you say that something should be done?—Yes.

33107. With regard to the examination for managers' certificates of competency, you say that a man having failed in his own district to get a certificate ought not to be allowed to sit for examination in another district. Does that not seem hard, because there may be another district where he might pass. In the first place a man may fail in his examination in a particular district because in that particular district certain special qualifications are wanted which are not wanted in another district, so that he may be perfectly fit to be a manager in one district and not in another. It has been suggested to us by the witnesses?—It is suggested that there should be a uniform system.

33108. Some people say that a manager ought not to be allowed to go from one district to another without passing a fresh examination, and that his certificate should be only good for the particular district in which he gets it?—Our observation has been that there is a very much harder theoretical examination in some districts than others, and that the people concerned soon find out and will not enter.

33109. Supposing a man works hard and just fails to pass his examination, perhaps only fails in one subject. If he gets up that subject in three months, is it not hard that he should not be allowed to go in in another part of the country, although he could not pass three months before?—It would not be long to wait for his own district.

33110. He could always wait six months in his district, you think?—If there was a possible uniform system.

33111. He would have to wait a year, I am told. Your suggestion is that he should always wait a year if he does not pass an examination?—We suggest that there should be a uniform system and if he failed in one place he could not possibly pass in another.

33112. Would you suggest that the manager's certificate as at present should continue to be a certificate all over the United Kingdom, and that a man who had a certificate in one district should be allowed without any further examination to go into any other district. That is so at present. Do you think that is a good state of things? Apparently you do?—I think if he can pass in one district and is a qualified certificated manager and can get a position in another district, he ought to be able to get it. I would not insist on an exclusive county and keep a man, but if you had a uniform system he could go anywhere. We think an open market should be maintained.

33113. You would insist on a man passing an examination that would fit him to be a manager anywhere. You think whether they were fiery mines or not in the district, that he ought to know about fiery mines and that the certificate should be a certificate which would show that a man was competent to deal with any other class of mines whatever in the whole United Kingdom?—I do not think a man who could not deal with a fiery mine, whether he was in a non-fiery mine or not, should be made a manager.

33114. We are told in some districts that a man need not qualify in all the papers, but only get a certain aggregate of marks. A man may do well in every other subject except subjects connected with a fiery mine. He may know nothing theoretical or practical about fiery mines and yet get a manager's certificate which would take him all over the kingdom. You do not suggest that is a good thing?—No, because I think that any man who sits for an examination must know all about gases, whether a fiery district or a non-fiery district, and that forms the greatest portin of his merit. No one would get a certificate who could not say something as to gases in fiery mines.

33115. As to ankylostomiasis, you say men should be warned against polluting airways. Have you had any scare of ankylostomiasis in your mines?—We had it with other people. We have not had it as a district, but we were alarmed as other miners were and made every investigation by calling the attention of the medical officer of health for the country who made sundry inspections, and so on. We came together as a body of workmen from one firm in particular. and arranged amongst other things that men should be warned against polluting the airways and so on.

33116. Do you think there ought to be sanitary conveniences underground?—No, I have thought over the question and read about it, and I think it should be confined to the goaf at least, or the gob as we call it.

33117. With regard to ventilation in mines when a working is full of gas the men are withdrawn but from foul air there seems no protection if lights will burn.

(*Mr. F. L. Davis.*) Foul air apart from gas, I suppose he means?

(*Witness.*) Yes.

33118. (*Chairman.*) Do you think the ventilation is insufficiently attended to at present?—Yes.

33119. Do you think that Rule 1 as to ventilation ought to be amended?—It is rather indefinite. It says: "An adequate amount of ventilation shall be constantly produced in every mine to dilute and render harmless noxious gases." Do you think that should be amended?—Our experience is that places are worked so very hot. You see men stripped to the waist and men cannot even work in their ordinary moleskin trousers, but they simply take calico and so on, and we know where there is a lot of blasting obnoxious fumes come from the high explosives, now, worse than with the old gunpowder, and you see, the fireman is not responsible so long as a man will work. A man has to determine himself and come out of it. A fireman would withdraw him if there was gas, but there it is, hot and injurious, as we know. We see men come out of the pit in a bad state. There is no gas and there is no law broken.

33120. If they come from shot-firing?—Yes.

(*Mr. Ratcliffe Ellis.*) Under General Rule 1 there must be an adequate amount of ventilation to render harmless noxious gases. General Rule 7, which is the provision for withdrawing the men, says this: I do not think it is confined to gases—"If at any time it is found by the person for the time being in charge of the mine, or any part thereof, that by reason of inflammable gases prevailing in the mine, or that part thereof, or of any cause whatever."

33121. (*Chairman.*) Your point is it is not dangerous, only disagreeable?—And injurious.

33122. Injurious to health?—Yes.

33123. It is not likely to cause an explosion or an accident?—Not an explosion, but we have seen men made ill when there has been severe blasting. We have seen the fumes, but if there had been sufficient ventilation it would not act on them. They have been carried home ill.

33124. That would be noxious gases, gases from blasting.

(*Mr. Ratcliffe Ellis.*) I should think it is dangerous if a man worked in that and he is rendered helpless.

(*Dr. Haldane.*) That would clearly come under the Act.

(*Mr. Smillie.*) The Witness's point is that it is not so understood. It is only explosive gas.

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(*Witness.*) The fireman fires the shots and there is no gas. He has made his examination and if it is too hot he has no remedy. There is no gas; he could not withdraw the men.

(*Chairman.*) Too hot to be comfortable; not necessarily to be dangerous to health, but too hot to be comfortable.

33125. (*Mr. Smillie.*) By "too hot" you mean more than too hot in temperature. You mean that it might be full of smoke?—Yes, breathing and re-breathing it.

33126. (*Chairman.*) That would be dangerous, I should think. Too much smoke might induce disease?—But people in the colliery have no remedy. Of course if there is gas the officials withdraw the men instantly.

33127. (*Mr. F. L. Davis.*) Do you consider that there is not sufficient ventilation at these times?—Yes.

33128. Not a sufficient current of air moving to move these fumes and gases?—Yes. We think that the firemen should at least be responsible if the place was above or below such a temperature, and that there should be some more determining factor for withdrawing the men than the question of gas.

33129. If there were gas there, there is no doubt the men would be removed?—Yes.

33130. As there is no gas, you still think the amount of ventilation passing is not sufficient to clear?—Yes.

33131. (*Mr. Cunynghame.*) With regard to temperature, the mines are getting deeper, and as the coal gets exhausted the mines will have to be deeper and deeper in the future?—Yes.

33132. If so, the temperature will probably go on increasing?—Naturally so.

33133. You could not very well have a rule that when the temperature was exceeding a certain amount the men would be withdrawn. Would not that put out of work a great deal of deep mining?—No, I do not think it would put out of work these people, but I think they would find better methods of ventilating the pit.

33134. With these deep mines they could be ventilated and made cooler?—Yes.

33135. Have you formed any estimate as to the temperature? Perhaps you are not able to answer that question; it is a difficult one. What is the maximum temperature do you think a man ought to work in?—I am not sufficiently up in that.

33136. It is a very difficult point. Dr. Haldane will know about it better than you. Now with regard to coroners' juries, what do you think is the primary reason a coroner's jury is ever got together for. What is its chief business in the case of a fatal accident?—To inquire as to whether the man has met with his death in a legitimate way, or say it has been an accident, or neglect.

33137. It is chiefly to inquire into the neglect of certain persons?—Yes.

33138. If it is found they have been guilty of gross neglect, to put them on their trial for manslaughter?—Yes.

33139. If very difficult questions of engineering arise connected with an accident, would you agree those would be better inquired into, not with the object of finding this or that man guilty, but with the object of finding out the scientific defects at the bottom of it, by an inquiry under an expert under Section 45 of the Coal Mines Act?—That is in the second instance, after the first inquiry.

33140. It would be generally after the second inquiry. Would you not rather rely on a regular inquiry by an expert who would have full power of examining everybody, rather than a coroner's jury at all if it came to a question of the scientific aspects of it, to find out whether some practice had been done which was generally dangerous?—Yes.

33141. If you agree that the chief object of a coroner's jury is to fix blame to someone, would it not be better to have that jury composed of the generality of citizens rather than a jury of a particular class of men? Perhaps you will allow me, before you answer it, to put it in another way. Might not the doctors say, when there is a doctor killed, that we ought to have half the jury of doctors, and might not a cabman say, when a cabman is killed, "We ought to have half the jury of cabmen," and might not a seaman say, when a seaman is killed, "We ought to have half the jury of seamen"; in other words, might it not go on to such an extent as to be impracticable? On the whole, when you put a man on trial for his life is it not better, after all, to leave it to the generality of the citizens always remembering you have Section 45 in the background, to inquire afterwards, supposing that section to be properly worked? Do you follow the view I am putting before you?—Yes.

33142. It is one view of it, and I should like to have your opinion upon that?—You are rather leaving it that the independent composition of the jury now would be preferable to having miners who may be so one-sided.

33143. I am not giving an opinion: I am rather putting the other side before you. There is something to be said on the general ground of leaving coroners' juries in the case of deaths in mines much as they are in the case of general inquiries in the country.

(*Mr. Smillie.*) The Witness's complaint was that they were being kept out altogether.

(*Mr. Cunynghame.*) Assuming a fair proportion of miners in the ordinary course, on the whole you would agree with me?

(*Witness.*) If we had not made our observations that for a series of years miners had been kept out, we should not have presented this.

33144. (*Chairman.*) Do you mean miners are entirely kept out of it? Is there a jury which does not contain one practical miner?—I think I can remember one jury where they selected two miners.

(*Mr. Smillie.*) He only remembers one in which there were two.

33145. (*Mr. Cunynghame.*) It would be wrong if they regularly went round and purposely left them out?—I unhesitatingly say that is so.

(*Chairman.*) You have known coroners' juries on which there has not been sometimes one practical miner?

(*Mr. Smillie.*) He says on one occasion he knew there were two practical miners, but that is the only occasion he knows.

33146. (*Chairman.*) In all your experience of coroners' juries you have only known two practical miners called on to serve?—Yes.

33147. (*Mr. Cunynghame.*) Where are coroners' inquests generally held in the district you speak of?—Our present coroner objects to holding them in public-houses, but they are held nearest to the place to where the person is lying dead, say in a school-room, or something of that kind.

33148. From what place are the jury summoned, generally?—From that place.

33149. That may be or may not be near a mine?—It could not possibly be where there are no miners living.

33150. Your point is that for some reason or other the proper proportion of miners has not been called together in coroners' juries?—And if there had been special features that the accident brought out, it would not only have been a warning to the men at the colliery, but to the management sitting there listening to the thing.

33151. On the whole I gather it is your opinion that it is hardly worth while disturbing the law on general principles throughout the country. In your opinion when any particular case is being tried affecting a trade, a man in that trade must necessarily be on that jury, or six of them?—We suggest, in what we have put forward that as far as practicable some miners should be selected.

(*Mr. Smillie.*) Sub-section 7 of Clause 48 prohibits the selection of any miner employed in the colliery.

33152. (*Mr. Cunynghame.*) Mr. Smillie calls attention to this important provision of the Act Section 48, Sub-section 7: "Any person having a personal interest in or employed in or in the management of the mine in which the explosion or accident occurred shall not be qualified to serve on the jury empannelled on the inquest." You would agree with that?—I should not agree any man who worked in the colliery where that man was killed because he worked in that colliery should be exempted from sitting at the inquest.

33153. Or that it should disqualify him?—Should disqualify him. That has been put in operation in our district.

(*Mr. Smillie.*) That is the law.

33154. (*Mr. Cunynghame.*) Would you let the coal owner, the man who owned the colliery, serve on the jury?

(*Mr. Ratcliffe Ellis.*) Or his manager.

(*Witness.*) No.

33155. (*Mr. Cunynghame.*) I agree with you. That is the present law. Would you allow a person who had a personal interest in the matter to serve on the jury?—Not if he was a relative.

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33156. Anybody who had a personal interest in the colliery ?—If I am working at a colliery and I am away from anywhere where that man was killed, why should I not serve on the jury ?

33157. If you would not allow the owner to serve on the jury is it not better not to allow the men either, and have an impartial jury ? It says, " in that particular colliery." Do you not think it is better in fairness to have no one connected with it when a man's life possibly is at stake ? It is not merely to inquire into the cause of death, but possibly to put a man on his trial for his life, miner or manager. You appreciate he may be a miner or a manager ? —If he is a miner at that colliery and is not in that stall, but away at another extreme end of the pit, and has nothing to do with it, and could put some question or phase of it that these people know nothing about, I should think it was a good thing for him to be present.

33158. He could ask questions : that is another point. I am speaking of serving on the jury.—We think that that should not exempt a man from serving on the jury because he works for the colliery company under which this said accident is concerned.

33159. I can imagine also a case in which the proprietor of the colliery knows nothing about it : he may be far away from the accident and know nothing about the accident, and yet you think it fair not to let him serve, as to which I agree with you.—I seem to have no case. The position is summed up in that. We have no district where the miners are intermingled. They are all one firm. One spot there, that is all one firm. You could have no miners serving on that inquiry or inquest beside a man out of that colliery.

33160. It says no one shall serve who is in the management of the mine in which the accident occurred. It is only the mine in which the accident occurs : they do not let the man be chosen from that.—Here is a colliery company which has 10 pits, (only once in my lifetime have I known, as I have said, two men) and because they worked for that colliery company (they worked at other collieries, but of course that is in the same district, in which we may term a nest) they have not been allowed to serve.

33161. Do you not think if it is fair and proper to exclude the owner of the mine in which the accident occurred, the better plan is to take the thing generally and exclude everybody working therein ? If one is likely to be unfair is it not possible the other would be unfair ?—Then we shall never have miners serving.

33162. A man can be got from another mine ?—He would have to come, in one or two cases, 12 or 14 miles.

33163. Possibly.—And in other cases 5 to 10 miles.

(*Mr. Cunynghame.*) Possibly.

33164. (*Mr. Smillie.*) Are those 10 pits in that locality one mine ? They may belong to one owner, but they are not one mine ?—No, 10 mines.

33165. This only means the particular mine at which the accident takes place ?—The particular shaft.

33166. (*Mr. Cunynghame.*) The law is you may have a man from the other mine, but not from the particular mine in which the accident occurred.—I am saying that does not operate.

33167. You are telling us as if it has not been satisfactorily carried out, but I am asking as to the law. You would be satisfied with the law as it exists if it was carried out, would you not ?—I have made reference to this. I should be satisfied when the police are forming the jury, if it is understood from that particular pit they could not have that man, but from the next pit, perhaps a quarter of a mile away, they could have a man.

33168. Taking the jury impartially from the neighbourhood round. There would be a butcher or two, a miner or two, one or the other ?—Yes : that is what we are asking.

33169. According to that, if the jury was properly assembled, the law at present is sufficient ?—We say that the people who have been carrying it out have not carried it out properly.

33170. I see. If they carry it out properly the law seems sufficient, does it not ?—Yes, but that has not been the construction put upon it.

33171. I only wanted to get to your point whether it was a point of law that required alteration, or practice. According to you it is the practice that requires alteration ?—Yes. In my opinion it prevails not only in my own particular district, but there is a complaint generally throughout the country.

33172. That we will certainly remember and take notice of.—I think I am correct in saying it not only applies to us, but having miners on inquests is studiously avoided.

33173. That is the impression you have got, at all events ? —Yes.

33174. You are acquainted with Section 45, which provides that inquiries may be made in addition to the coroner's inquest, an inquiry by the Secretary of State ?—Yes.

33175. Is there any complaint in your district that those sections have not been put into effect where they might have been put into effect ?—Of course we have accepted the ruling of the people concerned.

33176. Can you mention any case ? I do not think you can, if you ask me.—No, I could not suggest that any verdict at an inquest had not been brought in according to the facts of the case.

33177. And that the facts had been pretty well brought out as the inquest, at much as they could probably be got out ?—No, we do not think that.

33178. Can you mention any case in which an inquiry would have carried it further than the coroner's inquest ? —We think some people would have been censured.

33179. I am coming to that. The object of the inquiry is not to censure people : that you leave to the coroner : the object is to find out the cause of the accident.—We say that by a jury who have not a general knowledge of mining there are many things which have not been brought out.

33180. (*Mr. Ratcliffe Ellis.*) I did not know that there was such a scramble to get on juries. I have generally found people anxious to keep off them. Do you find men are anxious to be on coroner's juries ?—I have never felt that way.

33181. Particularly anxious to be on or off ?—If the police have come and have asked me I have made every sacrifice, but it is well known they never come when there is an accident.

33182. I believe it is about 1s. they get for attendance ? —I have never had 1s. I have been foreman of the jury when selected and I have never had a shilling.

33183. Do you think a miner would care to lose a day by attending on a jury ?—We do not think they would lose a day.

33184. Would somebody pay them ?—No. We think in a colliery district there are men on the night shift who are at home and who would serve if they had been asked.

33185. They are at work in the night, and would serve on the coroner's jury in the day-time. Why do you want them on the jury ? You can call them as witnesses. You can call any man who has some special knowledge as a witness, or he can give information to persons to put questions. Why do you want them on the jury ? I am assuming the object of the coroner's jury is to find out the cause of death, secondly, whether anybody is to blame for it ?—Yes.

33186. Why do you want the men on the jury ?—To find out when and whether there has been any dilatory method in the management.

33187. If they have any information they can give it as witnesses ?—These people can intentionally do that ?

33188. Any person in a mine. A miner who knows something special about it can give evidence ?—He is not called.

33189. He may be called ?—Who would call him ?

33190. If the coroner got information that there was a man who knew something about it, he would be called ?—That does not take place. The people who give evidence are left with the colliery people.

33191. You say they are left with the colliery people, but my experience is that the policeman who helps the coroner and his warrant officer gets all the evidence he can from everybody, and brings it before the coroner to be called, not the colliery people ?—I am afraid that is not so.

33192. Have you found that coroners refuse to call people who might volunteer as witnesses ?—No. The coroner simply comes on the scene and the officer has, of course, the nearest relative and the man nearest to him when he was killed, or the men who have helped to get him out, and the fireman.

33193. They are all called ?—Yes.

33194. Will you explain why you want the miners to be on the jury ?—That there may be a closer investigation.

33195. Do you think there would be ?—Yes.

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33196. Do you think the investigations are not sufficiently complete for the purpose of ascertaining the cause of death and whether anybody is to blame? Those are the only two things the coroner has to do?—We think that there have been instances where at least you could have lodged a case of manslaughter and so on. There have been many lax things in connection with the whole circumstances, and it would have been of very great value if men who had known the work had been at the place.

33197. Mr. Cunynghame has pointed out the object of the coroner's inquiry is limited, first of all to ascertaining how the man came to his death, and secondly, is anybody to blame for it?—Yes.

33198. Those are the only two things the coroner has to inquire about. Do you think upon those two points that there is not sufficient investigation before coroners' juries?—It comes to our knowledge that there has been a juror who has had to ask what a prop is. The jury have not known what is meant by a tree, they have asked, when you say you set a tree, what you mean. They had an idea it was like a tree for apples to grow on, and if the soil that fell on him was the soil of the ground. They show absolute ignorance.

33199. In a colliery district is it not rather exceptional to find anybody so absolutely ignorant of colliery matters as that? Many of the shopkeepers have probably worked in a mine in their earlier days?—There may be some instances, but not many.

33200. In your district it is not so?—Yes.

33201. With regard to inspection after an accident, you think things should be left as they are?—Yes.

33202. That is the law now. Have you the Act of Parliament before you? Section 35, Sub-section 2, says: Where loss of life or serious personal injury has immediately resulted from an explosion or accident, the place where the explosion or accident occurred shall be left as it was immediately after the explosion or accident, until the expiration of at least three days after the sending of such notice as aforesaid of such explosion or accident, or until the visit of the place by an inspector, whichever first happens." That is to say, the law requires matters to be left exactly as they are until the inspector comes?—We say they are not left.

33203. That is a violation of the Act of Parliament.

(*Mr. Smillie.*) Is there not "unless" something?

(*Mr. Ratcliffe Ellis.*) Unless compliance with this enactment would tend to increase or continue a danger or would impede the working of the mine." It could not be left under those circumstances.

(*Mr. Smillie.*) It is easy to say it should not be left.

(*Mr. Ratcliffe Ellis.*) That is an evasion. At present that is the law of the land. You would not ask that things should be left exactly as they were if it was going to cause danger of fire?

(*Witness.*) No.

33204. You do not want it to go on burning?—No, but if there was an absence of timber and men had been calling out for timber for three weeks and there had not been any timber sent down, I do not think as soon as ever this accident occurred that loads of timber should be taken to the pit and sawn up and sent down and got ready by the time the inspector comes. In two or three days the whole thing is changed. I am bound to say that is so.

33205. Supposing that the place was dangerous and there was a danger of a further fall, would you wish that it should remain as it is, the danger increasing and the place coming down?—That is not what I am asking.

33206. Assuming this rule was honestly carried out, is there anything more that you want?—No, only that if it was known the management did that and the people who did it were prosecuted, then they would not do it.

33207. Then it goes on to say: "Every owner, agent or manager who fails to act in compliance with this section shall be guilty of an offence against this Act." That is to say, he is liable to be prosecuted if he alters the conditions unless it should be necessary to prevent any further danger. I do not understand you to wish anything further than this enactment, but you say it is not carried out?—Yes.

33208. And there are cases where the rule has been violated and nobody has been prosecuted?—Yes.

33209. Do you think the inspector has been deceived in those cases?—I think so.

33210. Do you not know that in practice the first question the inspector asks is: Is this now in the condition it was when the accident happened?" Do you know that?—Yes.

33211. Do you think he is deceived?—I am sure he has been.

33212. It is unfortunate?—I have known the timber sent down and have seen it sent down.

(*Mr. Smillie.*) He is sure it has been done.

33213. (*Mr. Ratcliffe Ellis.*) I should not think that they were so innocent as to be so imposed upon. With regard to the safety catches, have you heard that at times the safety catches come into action when they are not wanted and cause accidents?—I could not say that I have.

33214. Have you heard of an appliance by which the engine can be stopped in case the speed is not diminished when it comes to a certain point in the pit to prevent over-winding?—To stop the engine instead of cutting off at the top.

33215. By which the engine is stopped. You have not heard of that?—No.

33216. Do you think safety catches can be applied satisfactorily to steel conducting guides?—I am afraid I am not an expert in that.

33217. I suppose that when you say you wish safety catches should be made compulsory, that is subject to their not causing a greater danger than they are intended to prevent?—Quite right.

33218. You have said nothing about the rope. Do you not think the tension of the rope is more important than safety catches?—Is that a suggestion there should be a stronger rope?

33219. No, that the rope should be carefully taken care of, the capping and the rope itself?—I am not complaining that is not so.

33220. If the rope is satisfactory and the capping is satisfactory, you do not want safety catches. It is only in case of the failure of the rope?—Yes, when the rope is broken.

33221. Do you know people of considerable eminence say that they would prefer the rope should be properly looked after rather than have safety catches, because they are apt to come into action when not wanted and so cause danger? You have not heard that view?—No. We have advocated it, because it is about the only place where a man cannot take care of himself, and if there is anything in the ingenuity of man the question of cost should not come into it.

33222. I agree every care should be taken to prevent accidents in the shaft, but the question is whether safety catches are the proper way to do it?—All I have heard against it has always been the question of cost, and we think that life should be more important, not, as you suggest, that they would act when it was unnecessary.

33223. If they did come into action when they were not wanted, the effect might be very disastrous?—That is so, but I have never heard that argument offered against it. The argument offered against it is the question of cost.

33224. With regard to unskilled labour in the mine, what is the sort of labour you refer to? What does the person do who is unskilled?—That is what we find. He is set on to load, perhaps he has been on a farm all his life or at some other industry, and knows nothing about mining. He comes into the pit to load. That is unskilled work.

33225. The rule is that a man must not get coal unless he has been working two years at the face?—That is not the application of it. I will tell you the practical application of it is this. If he is put with some more people and there is one among that number who has had two years' training it is all right.

33226. I want to know when is a man going to learn to become a coal-getter except by working at the coal face with a coal-getter as a loader or a drawer?—We suggest that there are many things in a pit, that there is a natural training. A man who has not gone into the pit until half way through his life is not a proper person to be employed.

33227. A man must learn somehow or other in the pits You say he is too old to learn if over 18?—Over 21. I would make it 21.

33228. You would provide that no man should be allowed to work in a pit who was not in a pit before 21 years of age?—I think so.

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33229. Does the collier employ his own drawer or loader ?—No, he could not take him to the pit.

33230. Does he pay his drawer ?—Yes.

33231. This unskilled labourer is the servant of the collier ?—Yes.

33232. What has the management to do with that ?—The management has this to do with it: as soon as that man has been in the pit a month or two we say that he is set to work, and that he is as least incompetent.

33233. The collier takes this unskilled man in as a drawer ?—Yes, in many instances. The collier is not favourable to taking an agricultural labourer in.

33234. Who does take him in ? The drawer is paid by the collier and this is a drawer and loader, who is the collier's servant ?—Yes. What usually takes place, if there is labour wanted, is the manager at the pit top puts one on and tells him that next morning so-and-so wants a loader.

33235. The loader is not employed by the management at all, but by the collier, and paid by the collier ?—So much per ton for loading.

33236. He is the collier's servant ?—Yes.

33237. Therefore, the collier takes in these unskilled people ?—Occasionally.

33238. It must be the collier, because they are his servants. Does he take them because there is no skilled labour available ?—He does not want skilled labour. He wants to use them until moved up from the class of loader to another.

33239. Why does he not take one of them ?—He would.

33240. If there was one ?—Perhaps so.

33241. If there was not one, would you deprive the collier of his work because he must have a drawer to help him in his work ? Would you make the collier idle because you would not allow him to take a man to help him as a loader ?—It is not necessary to take in loaders. They are usually loaders before they come up to 21.

33242. We are talking about unskilled labour. You tell me that it is not the management who take men into the pit, but the collier. I suppose he takes them in because there are no other people available for the purpose ?

(*Mr. Smillie.*) The manager says: "Come out to-morrow; so-and-so wants a loader," and the management engages an unskilled person and sends him down.

(*Mr. Ratcliffe Ellis.*) The witness says the collier could not work unless he had a drawer or a loader and, therefore, if he has not a loader he would not work himself. There is a scarcity of them. If I am not right I want to know what you say. There is a scarcity of loaders amongst the people who work in the pit and, therefore, the collier gets a man who works outside the pit. He may be recommended by the management.

(*Witness.*) He could not get him down unless the management gave him consent.

33243. Is it not this: either the collier must take this man down or not work at all. It is at his own option ?—He must either have a loader or load himself.

33244. He would get less money if he loaded himself ?—There are not many that like loading.

33245. It is not the management that employ the unskilled men, but the colliers, because skilled men are not available, and they employ them rather than be idle themselves ?—I do not think they would be idle.

33246. However, that is the position ?—Yes.

33247. With regard to fines, were there ever fines in your district ?—Yes.

33248. Do you have fines now ?—Yes.

33249. At the request of the men ?—No.

33250. You cannot fine a man unless he is willing to be fined ?—No, and they do not fine them until they have got their consent because of the Truck Act, but they say: "You have done so and so; we shall give you notice, or else you can have a fine," and the man says: "I shall submit to a fine."

33251. Have you not known cases where the man has been threatened with prosecution and dismissal, and he asks to be fined rather than prosecuted or dismissed ?—It may be offered to him, and he selects it.

33252. There may be cases in which he asks to be fined rather than prosecuted ?—Yes. I should think he always would.

33253. In your view it is not a satisfactory way of maintaining discipline. A man ought to be prosecuted or dismissed ?—Yes.

33254. That is your view ?—Yes; we say he ought to be prosecuted. I am not so sure he ought to be dismissed, because that is not the law. I know the employer has the choice of either, but we think prosecution would be more effective to discipline than stopping a man's money.

33255. Fining will cost him more if he is taken before the magistrate ?—It costs more, but besides that there is the publicity of it, which would make it a good while before he commits the offence again, and, further than that, it would be a warning to the other men in the pit.

33256. (*Mr. Smillie.*) Your district is the Staffordshire Inspection District, No 9 District, it is called, I think ?—Yes.

33257. The geographical area is not so large as many other districts ?—No.

33258. It is pretty thickly populated with miners. I mean the Staffordshire Mines Inspection District ?—Yes.

33259. 55,000, nearly 56,000 miners under the inspector there—mine workers, I mean ?—Yes.

33260. A very large proportion of the lads in the mining districts will in all probability go to the pits ?—Yes.

33261. We may put it 70 per cent. or 80 per cent., I daresay ?—Not miners' lads.

33262. Of the lads in a mining district ?—I must say that there is a very strong objection on the part of the miner for his lad to go in the pit.

33263. I am speaking of the lads in the village. 70 per cent. or 80 per cent. of the lads in a mining village go to the pits to work ?—Yes.

33264. You have had experience on the County Council, I think ?—Yes.

33265. And with the Education Board of your district ?—Yes.

33266. Do you think it would be a very reasonable thing to give lads, who in all probability would find their way into the pit, some information in their school days as to the dangers likely to be faced underground ?—Yes, I should think so.

33267. At the present time the lads are sent into the pits absolutely ignorant of the surroundings, of the nature of gases, or the dangers which may be faced underground ?—So far as the schools are concerned in the county.

33268. Except for the information they get from the parents. I mean so far as their education at school is concerned, there is no attempt to give them information of that kind ?—No.

33269. Do you think it might be useful so far as safety and also so far as general information is concerned, if lads were taught in the last two or three years of school life something about the nature of gases, ventilation and geology, or anything to give them a knowledge of the dangers by which a mine is surrounded ?—I should think so from my personal knowledge.

33270. You think it might lead to greater safety underground ?—Yes, and it would prevent what now exists—the boys ignoring mining life and wanting to get away from it.

33271. It may perhaps lead to discipline, too ?—Yes.

33272. A lad who is absolutely ignorant of the great danger of explosive gas or other dangers underground is more likely to play with things than he would if he actually knew the dangers ?—That is so.

33273. Do you remember the time when the Coal Mines Act provided that a lad could go down a pit at 12 years old, but on the surface he could not be employed until he was 13 ?—Yes.

33274. Thousands of lads were working underground at the age of 12, where they would not be employed on the surface ?—That is so.

33275. That was objected to very strongly by the miners ?—Yes.

33276. They thought in view of the greater danger underground the age should be higher than on the surface ?—Yes. What usually takes place is that a lad for a week or a month is employed on the surface, and then graduates into the pit.

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33277. When he is hardened?—When it was like that it was the other way about.

33278. The persons who desired to have the assistance of the lads would have preferred having them on the surface, but they could get them underground earlier under the old Act?—Yes.

33279. Now we have an anomaly of the same kind—where the Act provides for certain hours that lads and girls must work on the surface?—Yes.

33280. A lad of 13 or 14 underground may be employed eight or nine hours without a break at all?—That is so.

33281. There is no provision made in the Act for any care to be taken that he must have a break?—I have pointed that out.

33282. You think some provision should be made for the protection of young persons underground, quite as much as on the surface?—Yes.

33283. Probably more so than on the surface?—Yes, more so.

33284. Are the mines in Staffordshire generally—I know you will be able to speak for the whole district—considered large, to employ a large number of men?—Yes.

33285. Is the average small or large?—I should think it is small for employing.

33286. The average is small as compared with South Wales or other districts?—Yes.

33287. Would it average 120 or 125? Would the average number employed per mine be over 100 or 120?—In our Shropshire coalfield?

33288. Staffordshire as well?—More than that. The Staffordshire collieries are much bigger than ours. They have a bigger output, 1,200 or 1,400 tons a day, where we do not keep up to 100.

33289. That would mean the employment of thousands of persons underground in collieries of that kind?—Yes.

33290. The average number employed in each pit would be less than 100?—Yes.

33291. Based on an average of 100?—Yes, taking the average.

33292. In Staffordshire (you may be able to give the information I have not got), are there about 400 pits in the whole No. 9 district, which is included in the mines inspection—Staffordshire, Wallsall and Hereford—are there 400 mines do you think?—I should think so.

33293. You put it roughly there are 400?—Yes.

33294. Have you ever been appointed examiner, or did you say that in your districts you never had had examinations?—No.

33295. Have you ever examined a mine for any purpose, with regard to an accident or anything of that kind? Have you ever made a thorough examination of a mine itself?—No, not in that sense.

33296. Have you ever been a fireman yourself?—Yes.

33297. You have been employed as a fireman for a period?—A very short period. I was assistant to my father, say, when I was 20 or 21—when he was away I took his place.

33298. In answer to the Chairman you said you thought your present Staffordshire district might be reasonably well served with six inspectors?—Yes.

33299. That is the chief inspector, if you have one district, two of the present assistant inspectors, and an additional three practical miners appointed for that purpose?—Yes.

33300. You would be willing that those practical miners, if they are to be appointed for that purpose, should be qualified to the extent of holding a certificate of competency? Have you thought that part of it out?—I should object to them being appointed unless they had shown some efficiency.

33301. It has been suggested that they may hold a first-class certificate, as many practical miners are studying and have first-class certificates. You have no objection to that being one of the qualifications?—No.

33302. Provided they had sufficient practical experience to prove that they could do the work?—I should not consider they would come under that. Supposing it was a manager who had gained a first-class certificate and had put in for the position, I should think he must have been a man working at the coal face.

33303. Your first qualification would be a number of years practical experience at the coal face?—Yes.

33304. Secondly, you would not object to it being laid down that he must hold a first-class certificate of competency?—No.

33305. He would require sometimes to consult with and advise the colliery manager, who did hold the first-class certificate?—Yes.

33306. Did you really intend to divide this district into six parts, and then confine each of those six men to his own particular district, or would you not be as well pleased if the three practical inspectors, the lower grade inspectors, were put under the charge of the chief inspector?—I think that was rather there I was at sea, inasmuch as what I was aiming at was this. There are now three, and to do the thing efficiently, we want three more.

33307. You want six altogether?—I did not want to confine myself to saying that they should be of the same grade as the chief inspector.

33308. You would be content to put the two assistant inspectors, and three of the third grade inspectors, under the charge of the chief inspector, and he could station them in whatever part of the county he thought fit?—Yes.

33309. You were concerned to have a thorough examination of the mines?—Yes. I complain when the inspector comes in the mine he does not see the worst part of that mine.

33310. I want to call your attention to the fact, supposing you had three additional inspectors, you would still have almost 10,000 miners for each inspector?—Yes, that is about the number.

33311. Do you think one inspector could make a thorough examination of all the mines in which 10,000 men were employed if the mines show an average of 200 men?—Yes.

33312. I mean make the examination which you say would be thorough?—That is a quarterly examination.

33313. Could he once a quarter examine all the mines?—I think he could.

33314. Make the examination which you desire?—Yes.

33315. The examination which you require an inspector should make is really the examination which all the fireman make every morning?—Yes.

33316. Of all the roadways, haulage roads and every road you require to travel, and the working faces?—I have known when the inspector has been coming and there have been bad airways and roadways for horses, that lads have preceded him and the men and horses have been withdrawn, and the places have been fenced off, and when he has gone by he has believed there has been no working, and as soon as he has gone up they have been put back and the thing worked under the old condition of things. I know that personally.

33317. Of your own personal knowledge you have known when an inspector was about to visit a colliery that information was conveyed either before he came, or when he came information was sent down the pit and objectionable portions of the pit were fenced off?—Yes.

33318. To that extent the inspector was deceived really?—Yes. I should desire the inspector should have the plan of the pit and should not be allowed to see only the part that may be in good condition and want to get back of course, but that a thorough inspection should be made as to the whole part of the pit.

33319. You believe that would lead to greater safety underground?—Yes.

33320. I suppose in an ordinary mine the manager may be fairly well satisfied that unless there is an accident he is not likely to have a visit from the inspector from one year's end to the other?—That is so.

33321. That is the general feeling amongst managers?—That he will not come for a long time unless there is an accident.

33322. Or unless sent for by yourself?—If anyone has sent an anonymous letter.

33323. You think six men for your own county, or, roughly, you might put it about an inspector for each 10,000 persons employed, could make the inspection that you want?—Yes.

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33324. I suppose after the visit of a mines inspector to a colliery it tends to get things put in order for the time being ?—Yes.

33325. And everything brushed up, although it may only last a few days ?—Yes; after there has been an accident that is the tendency and to get it ready for him.

33326. Or any time you may have him there to complain ?—As soon as the accident is fatal everything is prepared. and everybody is sent right and left on all the airways to get the thing in readiness.

33327. As a practical miner working underground up to a very few weeks ago, that has been your experience ? —Yes.

33328. The advent of an inspector was preceded by everything being put into condition ?—Yes.

33329. In every part of the mine he was expected to go ? —Yes.

33330. The law with regard to a place remaining in the state in which it was when an accident took place is perfectly right if carried out ?—Yes.

33331. It is supposed that a place is not to be interfered with after a fatal accident takes place until the visit of the inspector. Most accidents take place at the working face from falls ?—Yes.

33332. Is there any reason why the working face, where a fatal accident has taken place, should not remain exactly in that condition until the inspector came ? Does it stop the working of the mine in any way ?—It shuts off that particular working place.

33333. Unless it was likely to interfere with the ventilation there is no reason why it should be repaired until the inspector comes ?—No.

33334. Often even that particular place is in a different state when the inspector comes from what it had been previously ?—If it has not come into the keeping of the Mines Act in certain ways, that is if there has been any adjusting required to make it up, the mines inspector would not say, "This is not according to the Act" and that there has been an attempt made to set it right.

33335. If there was anything with which fault might be found with the officials of the colliery, that is likely to be put right before the inspector comes ?—I am sure.

33336. There are a great many accidents taking place through falls on the haulage roads also ?—Yes.

33337. Very often falls take place on haulage roads and horse roads by which no injury to workmen or deaths take place ?—Yes.

33338. Numerous falls take place ?—We say it is a good job the lad had gone by or he was out when it came.

33339. Many falls have taken place which the workmen in the pit anticipated were going to take place, and they have simply said it was a good thing the lad or man were through before it took place ?—They say when going in, "If there is not something done here there will be a crash some day."

33340. Under the Act it is the duty of the miners to call the attention of officials to anything of that kind ?— He would get dismissed if he did.

33341. That is the provision, but men do not do it for fear of being thought interfering ?—That is my experience.

33342. What you urge very strongly—I must admit I can see the importance of it—is that where a fall has taken place, not only should the debris be taken away, but that place thoroughly secured so that a pony driver or workman can go under it ?—Yes.

33343. Is that the case at the present time ?—No.

33344. Is not the dirt or the stone from the fall redd away and the shift continued before the repairing is done ? —Yes, if there is room between the roof and the rails, the rails are generally lifted to bury the dirt and they go on again.

33345. You have known cases where the rails were lifted and put over the dirt and the place left unprotected ?— With the intention if all went well to set it right at night.

33346. Taking the risk of a second fall from persons coming over ?—Yes.

33347. You object very strongly to that ?—Yes.

33348. Do you remember any accidents which have arisen in your own experience from that being done. Could you say from memory ?—Yes, I have known of lads with their hands on the tub, and so on, and their heads have got rapped just at that particular spot, and that is why I suggest, before lads go under again, it should be set.

33349. That is a very strong point with you ?—Yes.

33350. I think you stated that firemen should hold a certificate of competency ?—Yes.

33351. You are very strong on that point ?—Yes.

33352. Do you agree with some witnesses in saying that the safety of the workmen depends to a larger extent on the competency of the firemen, than even upon the competency of the manager ?—After my own personal experience I say that is so.

33353. The workmen have to depend for their safety to a greater extent upon the competency and skill and ability of the fireman in the different sections, than even on the manager himself ?—Yes.

33354. Because of that, it should not be left in a haphazard way with the manager to say that a person is competent without any proof of his competency ?—Quite so.

33355. If made compulsory that a certificate must be granted to a fireman, the manager would have some guarantee, so far as passing an examination was concerned, that this person was competent ?—He does not select, to my knowledge, his firemen for competency.

33356. But if he were bound to select a person who held a certificate of competency, there would be a guarantee that the person had some knowledge and had passed an examination ?—Yes.

33357. He would have that guarantee to begin with ? —Yes.

33358. At the present time is it always the case that the best and most skilled persons are appointed to the position of firemen ?—No.

33359. On the whole, I suppose a large number, probably the vast majority, of your men are good men ?— Yes.

33360. You have fault to find that sometimes the best men are not appointed for that position ?—That is so.

33361. Is it the case that sometimes persons are appointed to that position from favouritism, for one thing ? —Yes.

33362. And perhaps sometimes persons are appointed because they are willing to accept a lower wage than a thoroughly competent person would accept ?—Our district rate has fallen in that respect in previous years, and the wage paid to these men is lower, consequently there is a lower grade.

33363. The wages paid to firemen at the present time are not sufficiently high to tempt the best men into that position ?—As were previously paid.

33364. It is not so high as previously ?—No, such has been the competition. I am afraid the thing is worse as far as practiacl men are concerned.

33365. It would be at least some guarantee that good practical men were appointed if they required a certificate of competency, which carried with it that he also had so many years practical experience ?—Yes.

33366. Your district was at one time largely worked on the butty system ?—Yes.

33367. As a matter of fact your Special Rules provide certain guidance for contractors ?—Yes.

33368. 60 and 61 down to 67 deal with the duty of contractors, stallmen, or driftmen ?—Yes.

33369. Those rules were made at a time when a butty man or a contractor might take a section and employ a number of men under him ?—Yes.

33370. At that time the contractor or butty man was responsible for getting out the material ?—Yes.

33371. You say happily you are getting rid rapidly of that system ?—Yes, if we do not get it in a worse form —in the form of the fireman and the under-manager being responsible for other things instead of looking after the lives of the men.

33372. You are getting into a system, as far as the men at the working face are concerned, that they are paid by the colliery owner ?—Yes, direct.

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33373. Not by the butty man or contractor? When the butty man or the contractor was there, he was responsible for seeing the material conveyed out, and he usually made himself very active in getting that out?—Yes.

33374. Because it paid him to do so?—Yes.

33375. The more material that went out, the higher the wages?—Yes.

33376. Since you have changed your system, that duty falls largely on the fireman or under-manager?—Yes.

33377. That leaves him less time to look after the safety of the men employed at the coal face?—That is so.

33378. The fireman has statutory duties by law—his morning examination?—Yes.

33379. Within 2½ hours of the men starting work?—Yes.

33380. And he is also supposed to make a second examination of all the working places in his district?—Yes.

33381. I suppose, as a matter of fact, the duty of seeing the material out becomes of more importance than the duty of making a second examination?—Yes.

33382. Should a fall take place which is likely to interfere with the haulage going on, that fall would be attended to rather than his second examination?—He would stop to see it was cleared, or else he would soon have the under-manager or manager on the spot.

33383. He would make sure the traffic was the first thing to receive attention, or he would be found fault with?—Yes, that is my complaint, and under the butty he never did.

33384. The fireman, too?—Yes, he was not under the control of the butty, and was not allowed to interfere in any part of his duty with the production. He was solely confined to examination, and looking after the safety of the men.

33385. You are aware that by far the largest number of accidents arise from falls of roof and sides?—Yes.

33386. And, after that, haulage accidents?—Yes.

33387. This Commission has been appointed to enquire into the whole circumstances, and to endeavour to suggest some method of saving life and limb underground or about mines?—Yes.

33388. You think it would tend greatly to the safety of miners if the firemen were appointed to do no other duties than look after ventilation and the state of the roof, and generally the safety of the workmen?—That is my point.

33389. That is very useful, if that is so. With regard to ventilation, General Rule 1, to which your attention has been called, provides that an adequate amount of ventilation shall be provided to render harmless noxious gases. Your point is that it has become a pretty general understanding, in your experience, if they get rid of explosive gas, that they do not require to deal so much with smoke or other gases, which may be of a bad nature, blackdamp, or anything of that kind?—Yes.

33390. And a fireman, if he finds the working places clear of firedamp in the morning, tells the men the places are all right, although their places may not be in a fit state for them to work in?—Yes.

33391. I suppose you could not give us any words which would strengthen General Rule 1 in the direction of providing for that yourself?—No, I do not think I have any set sentence, save what is in my mind, which is that the fireman should be as responsible for obnoxious fumes as he is for gas; and that it might rest on him to say whether that working place is fit to work in, which he holds now is no part of his duty, if there is not gas, and if it is as hot as——.

33392. If a fireman found a roof in a working place required timbering, and there was no timber to be had, he should advise the workmen not to go in until he had timber?—Yes.

33393. If he found explosive gas there he would advise the workmen he could not go in because it was not clear?—Yes.

33394. If he found smoke or blackdamp, or the place in a foul condition for want of ventilation, he should be bound to advise the person he could not go into the place because it was not safe?—Yes, that is my complaint.

33395. That is what you want to be done, if it could be put in words?—Yes.

33396. (*Mr. F. L. Davis.*) I want to ask you a question with regard to the unskilled labour. Will you tell me whether I am right or not with regard to this. I understood, in answering Mr. Ellis's question, you did not make a point of there being very much unskilled labour employed, but that there were a few cases of men, such as farm labourers. Is that so or not? Your complaint is not that there is a great quantity of unskilled labour at the present time in the district?—We say there are people coming into the mines now, of course owing to the good trade and the ready demand for coal, who I do not think would have been permitted, and there are ways of getting them into work. Our system is the longwall system, which I think everybody understands. In straight work you could not make an agricultural labourer a miner, but in longwall work there are possibilities of linking them on with two or three, and one man a pretty good man. That is why we say unskilled work is coming in.

33397. I understand you to object, and you say there is danger. Your objection is not that there is a great quantity of it at the present time: is it, or is it not?—No, I could not say that there is a great quantity.

33398. You object to it, and say it is dangerous?—Yes, we say it is.

33399. You said the greatest proportion of accidents happened at or about the face?—Yes.

33400. If that is the case, and there is not a great amount of unskilled labour employed, it is the men who are skilled, who have been working all their lives in the face, amongst whom the greatest number of accidents occur?—I think if I could put that in a tabulated form, you would find there were least accidents occurring to men who have worked in the pit, as I have done, from when I was 10. You would find less accidents among that class of people than these people we are talking about, coming in at between the ages of 20 and 25.

33401. It is granted by all of us that the skilled men—such as the fireman, the inspector or the manager—should have experience at the face. You call him a skilled man. They are the most skilled men in the pit working at the face?—Yes.

33402. And by far the largest proportion of accidents happen to these men in or about the face?—There is nobody else working in the pit besides those at the face.

33403. There are a good many men employed in the road, and repairing, and other work. Have you ever heard it suggested that men from being accustomed so many years to danger become more careless?—Yes, that is often suggested.

33404. I do not mean to say that every man is so, but unfortunately a great number of accidents happen at the face to men who have been working there all their lives, and who have got accustomed to the danger, and once too often they have neglected to do something they ought to have done?—Yes, I have found that with men working in a low seam coming to work in a thicker seam; it is as dangerous as though they were going to war. At the same time, men who have been at the work have simply laughed at the danger there may be.

33405. With reference to inspectors, you say that you have seen people after an accident send timber down, and that the place is propped up by the timber when the inspector comes. You do not think that deceives the inspectors, do you? There may be a reason for it. The manager may say, "If I do not do it I shall have a tremendous fall; I must prop that up now." When the inspector comes the first question he asks is, "Is the place in the same condition as it was," and the man says, "No, I have put timber in." Do you not agree with me that the inspector would ask all those questions? "How much of this timber here was up when the fall occurred," and he would ask what exactly was the condition when the fall occurred?—I am to take it that they always speak the truth?

33406. I should suggest yes, certainly. It is a very dangerous thing for a manager if he was not to speak the truth to the inspector. The inspector has other means of finding out than from the manager's own statement. He can call anybody, and does. He questions the officials, and he questions the men?—And they generally tell one story.

33407. The managers are not the only people who do not speak the truth always?—At the same time I have heard men say at a miners' meeting, "We have no timber

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n our pit, and if anybody is hurt or killed, I shall sit there and you can bring my tea. I will never leave the place. I will stay night and day till he comes." We have often heard expressions like that, because it is generally known the place is doctored up ready for the inspector.

33408. (*Chairman.*) Have you known they do it—threaten to do it, and do it ?—No, not do it.

33409. You have not known them stay night and day, and have their tea ? They only say so ?—That is when we have come to a point of sending men down to inspect. We have had bad ventilation and no timber.

33410. (*Mr. F. L. Davis.*) You have told us when men come to the last point they refuse to make an inspection. The inspector comes down, and it is his business to find out the condition of things before the accident ?—Yes.

33411. He asks these questions, and the manager says, "I have sent in timber, I was afraid that I should have a bigger fall." He does not only question the manager. It is his business to find out from everybody what was the position before. Do you say that still being the case these managers practically invariably tell untruths to the inspector ?—If they say the timber has not gone down, and the timberman has not been ordered to send it down, I say they have told him absolute falsehoods, because I have seen it myself.

33412. You are speaking for your district ?—Yes.

33413. I do not think our district must be tarred with the same brush ?—I will make this admission—that everything is pulling up to a better condition of things. I have told you the abolition of the butty system, where the butty had to pay for the timber, has remedied many of the evils that existed, and the thing is becoming better as the days go by.

33414. I think we all think that. Can you tell me what was your great objection to the carrying of men in the two decks ? I do not understand what was your objection. Is it that you object to two decks having men in them, or the difficulty or danger at the loading point ?—We say that there is a loading point and an unloading point.

33415. You do not object to it at the top of the pit ?—For instance, they have to get to the first deck, and then be pulled up for the next lot to get in.

33416. That is one objection. Where that has to be done you object. Would you object where you have, as in many cases, two stages—two decks and two places for the men to get on at the same time ? The men get a little underneath on the lower deck, while the men get on the top deck. Do you object to that ?—What alarms me is this : I am speaking for a district, as is said, in North Staffordshire, where there are 64 men in a shaft—32 men going down, and 32 men coming up. I am thinking of what would occur if an accident happened, and the shaft was full of men.

33417. Your point is not very much the full decks, if you have two stages ?—I do not want them all in the shaft.

33418. You do not want too many men in the shaft at the same time ?—No.

(*Chairman.*) In the cages.

33419. (*Mr. Ratcliffe Ellis.*) You would have more frequent windings if you wound fewer men at a time ?—Not if we had some of our ideals neared by great pits where there are all these men, where there is simply a shaft set apart for them.

33420. That is a long way off. Take things as they are now. If you have fewer men in the cage you have more windings ?—I could not deny that, but it is all a question of danger.

33421. (*Mr. F. L. Davis.*) On the other point, you do not want too many men in the cage at the same time ?—No.

33422. Your objection to the two decks is only if they have to load and move the cage from the same stage. If they could load without moving the cage from two stages, either top or bottom, your objection would not be so great—I say there would not be so much chance of accident, but still it s ems with all these men in the shaft there is a very serious danger.

33423. As Mr. Ellis says, it is a question. You have to put the same number of men down, and you can put them down in double the number of windings by letting fewer down at a time, but it is a question whether there is more danger in the number of windings, than from having a large number of men on the cage at the same time ?—Yes.

33424. (*Mr. Smillie.*) 38 men you say ?—32 on a cage, and 32 coming up.

33425. That is 64 may be in the shaft at the same time ?—Yes.

33426. If anything went wrong with the engine-winder, if he were suddenly taken ill, your fear is that those 64 men might be killed ?—Yes.

33427. That is one of your fears ?—Yes.

33428. The other fear with regard to the double-deck cages and men going on at both decks, is because of the method of loading. You have to raise or lower, as the case may be ?—Yes.

33429. On one occasion you were put into the sump with other men because of lowering down ?—I was picked up myself, and thrown up the inset. I can show you my elbow where it was smashed. Three had got off, and I was the fourth, we were up on this landing.

33430. The top landing ?—Yes. It picked me straight up and threw me, and I can show you my elbow, if you like. There was a difficulty with the engine-winder and that is why he put us in the sump. He said he thought it was the top deck, and he put us right down.

33431. (*Mr. F. L. Davis.*) You were waiting to get on, waiting for the thing to be lifted, and the thing knocked you ?—Yes. We were waiting to go. Instead of that he put us down in the sump.

33432. (*Mr. Smillie.*) You have the two objections, at least ?—Yes.

33433. (*Chairman.*) I understood you to take two objections to unskilled workmen—first, that every now and then you got thoroughly unskilled persons into the pit, and secondly, that you had persons in responsible positions, such as head of a stall, who were not absolutely incompetent, but who were incompetnet to fill that particular position to look after the timbers, and so on ?—We say it works better, I could not say well at all, if you have three or four men—as we have explained there are eight or nine in a working place—capital fellows, and they have the best they can get, skilled or unskilled, then there is somebody all the while calling attention to them, and making them careful, but when you have the whole batch unskilled, you have a very serious conditions of things.

33434. I wanted to know whether I understood you. I understood you to say that there was not only a danger from employing thoroughly unskilled persons underground, but that there was also a danger that in some working places you had no man sufficiently skilled to look to the timber properly. Do you say that, too ? Sometimes in a working place you may have 9 or 10 men fairly competent miners, still, at the same time, you have no one of those 10 sufficiently competent to be head of a stall or a working place and look after the timber ?—Yes, and the employers will find it so if they will inquire into it, and those are the stalls where they have to be continually finding them wages. If they had a place as good as gold and good men could get a living, and you put them in, you would find the whole thing broken down.

33435. You do not understand the question. There are two ways in which unskilled labour may be detrimental to the safety of the miner. One where you have an absolutely unskilled man working at the face at all, whether with other people or not. That is dangerous if he is very unskilled. Another source of danger was, in every working place you ought to have one or two men thoroughly conversant with systematic timbering, and consequently able to advise those working with them as to how they ought to put up props and sprags ?—I say it mitigates the danger, and is not so apparent as if all were unskilled.

33436. My point is that there may be 9 or 10 men working at a particular place, all of them fairly skilled, but none particularly skilled—that is to say, no man among the 10 who will be capable of giving expert advice to the other 9 to set up timber, and that is a danger ?—Yes.

33437. You ought to have one man, at all events, in every working place more expert than an average miner, to teach the others what they have to do with regard to putting up timber. I understood you to say it was a source of danger because that was not always the case. Sometimes you find 9 or 10 men, and not one specially skilled, as it were ?—Yes.

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Mr. W. Latham.

5 Dec., 1907.

33438. (*Mr. Ratcliffe Ellis.*) A collier with two years' experience at the face—do you think he is not a skilled timberer? Does he not know how to keep himself safe? —I should not say a man who had been on a farm——.

33439. A collier?—If he had been working up at least till 21.

33440 A man who has been working two years at a face to qualify as a coal-getter, according to the Act of Parliament—do you find many men of that sort not able to do their timber?

(*Mr. Smillie.*) He says unskilled.

(*Mr. Ratcliffe Ellis.*) What is that?

(*Mr. Smillie.*) An unskilled person coming from a farm and getting two years at the face he would say is not a skilled person, but if working in the pit with two years experience in the face, he would be a skilled person.

(*Witness.*) Yes.

33441. (*Mr. Ratcliffe Ellis.*) There is no man working as a collier skilled enough to put up his timber unless he has worked in the pit before the age of 21. It comes to that, really?—Yes. You could not find a man who has come from agricultural work and had two years in a pit, and is what I would call a full-fledged collier and could take his turn at anything in the pit—coal-cutting, blasting, or anything of that kind. I should say two years is insufficient.

(*Chairman.*) In time he would become as skilled as other people who have begun early in life. It would take longer to do it.

33442. (*Mr. F. L. Davis.*) Does it not depend upon the intelligence of the particular man?—Yes.

FORTY-SEVENTH DAY.

Thursday, 12th December, 1907.

PRESENT:

LORD MONKSWELL (*Chairman*).

H. H. S. CUNYNGHAME, Esq., C.B.
WM. ABRAHAM, Esq., M.P. (Rhondda).
F. L. DAVIS, Esq.
THOMAS RATCLIFFE ELLIS, Esq.
JOHN SCOTT HALDANE, Esq., F.R.S.
ROBERT SMILLIE, Esq.
S. W. HARRIS, Esq. (*Secretary*).

Mr. WILLIAM HENRY PICKERING, called and examined.

Mr. W. H. Pickering.

12 Dec., 1907

33443. (*Chairman.*) You are the Inspector of Mines for the Yorkshire and Lincolnshire district?—Yes.

33444. I understand you have lately returned from India?—Yes, I have been back about three months.

33445. With regard to inspection, you put in certain diagrams?—Yes. They are diagrams showing irregularities in the present system, showing that the inspection staff is not in proportion to the size of the districts. (*Diagrams handed in.*)

33446. Then you give instances, and you say that there are three inspectors in the Yorkshire district, where 125,407 persons are employed, so that there would be only one inspector for 41,800 persons?—Yes.

33447. Then you say that in the two neighbouring districts there are seven inspectors for 137,102 persons, or one inspector for 19,586 persons?—Yes.

33448. You go on to say that if seven inspectors are necessary in Lancashire, it may be assumed that Yorkshire should have the same number also, instead of only three as at present. But I do not know that that quite follows, does it, because the districts may be different; some kinds of mines require more inspection than others, do they not? —That is so; but the Yorkshire and the Lancashire mines are not essentially different. I should say that the Lancashire mines are perhaps more difficult to travel, taking them all round, than the Yorkshire mines. But this diagram shows that in the Lancashire district a large number of persons are employed in the metalliferous mines and quarries. If you take the persons in the coal mines the difference is still more striking.

33449. Do you say that not so much inspection is desirable in metalliferous mines?—No, I do not say that. The difference in the number of people employed in coal mines is even more striking; there are 115,000 employed in Yorkshire, in round figures, and 60,000 odd employed in Lancashire in coal mines.

33450. So that on the whole you say that if anything you would require rather more inspectors in proportion to the number of men employed than you would in Lancashire?—I should take it all round about the same, if we take everything into consideration.

33451. You say that if seven inspectors are necessary in Lancashire, it may be assumed that Yorkshire should have the same number also, instead of only three as at present? —Yes.

33452. Then you go on to say that it does not appear that there is a redundancy of inspectors in any of the districts?—I think that is so. ✓

33453. You say that the irregularities can be remedied, if the present system is retained, by the appointment of additional assistants?—Yes. ✓

33454. But you are of opinion that greater efficiency of inspection would be obtained by a drastic reorganisation? —That is my opinion.

33455. Then you give certain objections to the present system. The first objection you take is that inspectors occupying high official positions of great responsibility are jaded and worried by details of clerical work, which could be much more efficiently performed by clerks?— Yes. ✓

33456. To what extent do you think they should be relieved of their clerical work?—I think the recording, keeping of all the papers, drafting the letters, and keeping all the records up to date, might be done by an office staff. ✓

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33457. They have an allowance, I think of £25 a year for clerical assistance ?—That is so.

33458. But that is not sufficient ?—It is not sufficient. You must have a man giving his full time to the work.

33459. And even so you consider that there ought to be more inspectors or assistant inspectors ?—Even so I think there ought to be more assistant inspectors.

33460. Then the next objection you take is to the artificial division of coalfields to form inspection districts. What have you to say upon that ?—At present some of the coalfields are divided between two inspectors, and the counties also. Lancashire, for instance, is in three inspection districts, the parish boundaries forming the boundaries between some of the districts. I think that complicates the statistics, and also complicates the administration of the Act.

33461. Do you suggest that instead of the present system there should be seven what you call natural districts ?—That is my view; and I have prepared a map. Further on in my evidence I have gone on to point out the remedies.

33462. Yes, and I was going to deal with that, and I was going to take you to your second remedy by way of explaining the objection that you take to the artificial division of coalfields. Your remedy for the artificial division of coalfields is that you should have seven natural districts, as you call them ?—That is so.

33463. Those natural districts you think should be: (1) Scotland (Glasgow centre); (2) North of England (Newcastle centre); (3) Yorkshire, Derbyshire, Nottinghamshire, &c. (Sheffield centre); (4) Lancashire, Cheshire, North Wales (Manchester centre); (5) Midland (Birmingham centre); (6) South Wales (Cardiff centre); and, (7) Southern (London centre) ?—Yes.

33464. You think that an inspector should be placed in charge of one district, that he should have an office and an adequate clerical staff in the town selected as the centre or headquarters of his district, and that his official title might be "Chief Inspector of Mines of a District" ?—Yes.

33465. Then you would only have, instead of the present 12 chief inspectors of mines, seven ?—I would have seven, and deputy chiefs.

33466. You would also have deputy chief inspectors ?—Yes.

33467. Therefore you would only have seven of the first class instead of 12, as at present ?—Yes.

33468. You would have, first of all, an inspector at the head of each of these seven districts, and then you would have a deputy chief inspector, and then you would have a third class of assistant inspectors ?—That is so. In some of the large districts which I have mapped out I should have two deputy chief inspectors.

33469. How many assistants would you have ? Do you go into detail as to the number of assistants ?—I have a statement here which I have drafted; of course it is only a rough draft. I estimate seven chief inspectors, 10 deputy chief inspectors, and 37 assistants.

33470. (*Mr. F. L. Davis.*) How many more would that be than at present ?—About 14 more.

33471. (*Chairman.*) What sort of men would you have as the third-class inspectors ?—I should have them quite of the same class as at present.

33472. The same class as the assistants ?—I would have men who could rise to the very top.

33473. And I suppose pay them a fair commencing salary ?—I should pay them a salary quite equivalent to what they get now.

33474. Equivalent to what the assistants get now ?—Yes; I should pay the lowest grade that salary at least.

33475. Then you would pay the intermediate grade something which would be between the amount paid to the assistants and that paid to the chief inspectors now ?—That is so. I have not really gone into the question of salaries. I think personally the salaries are too low all round to get in the future the best class of men. Wages and salaries have gone up enormously in the last few years.

33476. So that, although at present you think that the chief inspectors and assistant inspectors are good men and quite capable of doing the work properly, still, at the same time you are rather apprehensive that if salaries are not raised an inferior class of men may come in in the future ?—That is my fear. I will hand in a statement of the districts. It is a statistical statement showing the number of persons employed in the different counties, and the number of persons in each district.

33477-80. Then you draw attention to the want of uniformity in the policy of the administration of the Acts in the various inspection districts; and you say that the remedy for that would be the constitution of a Mines Department as a branch of the Home Office, under an official entitled "The Director of the Mines Department ?" —Yes.

33481. What you now wish to do is to suggest that the want of uniformity in the mining policy throughout the country ought to be dealt with by the constitution of a Mines Department, at the head of which should be a director of the Mines Department ?—Yes.

33482. Then you say that you object to there being no central office where records can be kept, and where coal owners, managers and miners can go for information ? —Yes.

33483. That would be rectified by the establishment of a Mines Department where all these documents could be got at ?—That is so. There was a great difficulty found, I believe, in the last Commission on Coal Supplies in finding records and getting information; and there are other reasons.

33484. You say now that the issue of 12 administrative reports of inspectors, and the complication and confusion of mineral statistics which that entails, is objectionable ? —Yes. I think there are too many administrative reports and too many statistics, and they are too complicated. The statistics are artificially divided and artificially split up. I think that would be avoided by having natural districts.

33485-8. You would still have your seven administrative reports ?—Yes; I think that is very important. I would not lower it in any way, I would raise the standard of reporting.

33489-92. You say it is not desirable, in your opinion, that mines should be frequently inspected in detail by Government officials. Such a practice would, you think, relieve managers and owners of their legitimate responsibility and throw it upon the Government. Why do you say that ?—I think if you have a Government official constantly going to the mines, the managers and owners will at once not take so much responsibility on themselves, they think that the supervision as regards safety is coming from the Government, and they will more concern themselves with the economical questions. At present we try to make the managers and owners as responsible as we can.

33493. Then you say that it is sufficient if Government inspection ensures a uniform observance of the regulations and the punishment of officials who neglect their duty. That is rather a vague statement, because there is much virtue in an "if" there. When you say that it is sufficient if Government ensures a uniform observance of the regulations and the punishment of officials who neglect their duty, I suppose that is all that could be desired of any sort of inspection, whether it was twice a week or whether it was once a year ?—That is so.

33494. How often do you consider the mine ought to be inspected, and what kind of inspection do you consider sufficient ?—I think every year is enough.

33495. You think that a mine should be thoroughly inspected once a year ?—Yes.

33496. Do you mean that all the working places and the whole mine should be gone through once a year or only that the mines should be sampled ?—I am afraid it would have to be only sampled to a great extent.

33497. As it is at present ?—Yes.

33498. You consider on the whole that in some inspection districts, at all events, the inspection is sufficiently carried into effect—that in some of these 12 districts present at existing the mines are sufficiently well inspected? —They are fairly well inspected.

33499. And you do not think it is desirable that they should be more inspected ?—No, I do not at present.

33500. Then as regards the qualification and appointment of inspectors and assistant inspectors, you say it

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Mr. W. H. Pickering.

12 Dec., 1907

is essential that the inspectors and assistant inspectors should have the highest possible practical and scientific mining knowledge and should be men of all-round general education?—Yes.

33501. You think that where zeal is equal a good class man will do more effective work than two with second-class qualifications?—Yes.

33502. You say that no person should be eligible for the appointment of inspector or assistant inspector of mines unless he held a first-class certificate under the Act and had held charge as a manager or under-manager of a mine?—Yes.

33503. Therefore, you would not leave it as at present with the Home Office to decide what the qualifications of a mining inspector should be; you would have it laid down in the Act of Parliament that he must hold, at all events, the equivalent of a first-class certificate?—I would.

33504. And not only must he be a thoroughly qualified and experienced person but he must have held charge of a mine as manager or under-manager of a mine?—I think so. He gets a better practical experience if he has to go through the whole mill.

33505. How long should he be the manager of a mine and qualified, do you think?—A comparatively short time. A year would be sufficient, if he was a thoroughly practical man to begin with and had a good training or had trained himself.

33506. Then you go on to say that this would inflict no hardship upon anyone, for if a man wishes to fill a high official position, he should qualify for it by climbing through the lower grades?—Yes.

33507. He would begin in every case as one of these assistant inspectors at the third grade?—No; I would not appoint him an inspector of the third grade unless he was qualified by a first-class certificate.

33508. He would first of all have to be a manager or an under-manager, and besides that he must pass a certain examination at least equivalent to a first-class certificate?—He would have to hold a first-class certificate and then he would have to pass the Government examination for an inspectorship.

33509. You say that the area of selection should be made as wide as possible and the system designed to cover the men of all classes of training?—Yes.

33510. Then you say that working miners who have supplemented their practical knowledge by self-education and attendance at the excellent mining and scientific classes held in the colliery districts, should be given equal opportunities as University men who have put the pitman's hall mark on their degrees by thorough practical work in the mines?—Yes.

33511. You add that candidates might be nominated by the Secretary of State as at present, but not less than 10 for each appointment?—Yes.

33512. Why do you think it should be necessary that as many as 10 should be appointed?—I think it would be as well if a number were fixed so that you would have a competition and get the best men. I think they ought to be nominated so as to make sure that you are getting the right class of man, to begin with—not simply competition men who can pass the examinations; you want them sound, practical pitmen as well as theorists.

33513. The Secretary of State would have the nomination, I understand?—The Secretary of State would have the nomination.

33514. But it would be rather difficult for the Secretary of State to refuse to nominate a man who had qualified as a manager and under-manager, and who had passed all the requisite tests under the Government examination?—He refuses at present: he does not nominate everyone who applies.

33515. He now refuses to allow some persons who are qualified to stand for this examination for an inspector?—All who apply are not nominated; I know that.

33516. Then that only carries into effect the present procedure?—Except that you have a number nominated.

33517. You say at least 10 for every appointment?—Yes; I would have a number nominated.

33518. You say that the candidates should be examined and the *viva voce* examination should be very searching?—Yes.

33519. And you say that marks should be given for experience and alertness, mental and physical?—Yes.

33520. And that the theoretical and scientific knowledge of the candidates should be tested by ordinary written examination, but a thesis on a mining subject and a plan of a mine on which to show a system of ventilation should be included?—Yes.

33521. Is there anything you would like to add to your statement with regard to the examinations?—No; I think you have asked me all the questions which are essential.

33522. I will go to the next question, which is inspection by officials under General Rule 4. You say that General Rule 4 is in Yorkshire supplemented by Special Rule 13, which reads as follows: "The under-manager or deputies, or other competent persons duly appointed for the purpose, within three hours immediately before the commencement of each shift, shall make the inspections and reports required by the first part of General Rule 4. The persons making such inspections shall leave a mark at each working place, showing the date of such inspection. The undermanager or deputies, or such other competent person, shall make the inspection during shifts required by the second part of General Rule 4."—Yes.

33523. With regard to that point, you say that these rules are not satisfactory: the interval of three hours is too long; the rules should be altered to provide for the inspection before the commencement of the shift to be made within two hours of the time at which the men should arrive at their working places, and for at least two inspections during the shift?—Yes.

33524. I believe there are Special Rules to that effect in other parts of the country?—That is so.

33525. You add that shifts, even when following each other without an interval, should be deemed to be separate shifts?—Yes.

33526. And a report should be made specifying the condition of the mine or district during every inspection?—Yes.

33527. You are of opinion that the reports of the inspections before the commencement of the shift should be immediately recorded in a book kept at the station for the purpose, and that the reports of the intermediate inspections should be recorded at the end of each shift?—Yes.

33528. That is a very important matter under Rule 4. You first of all say that the interval ought to be only two hours instead of three hours, and that the shifts even when following each other should be deemed to be separate shifts?—Yes.

(*Mr. Wm. Abraham.*) That would give an extra examination.

(*Chairman.*) What is the rule now about separate shifts?

(*Mr. Ratcliffe Ellis.*) There is one examination during the shift and one preceding it. It is suggested that there should be two during the shift. The time before the shift in Special Rules is "Not exceeding three hours."

33529. (*Chairman.*) Then you say that a report should be made specifying the condition of the mine or district during every inspection?—Yes.

33530. (*Mr. Ratcliffe Ellis.*) I suppose you would not allow the last inspection of No. 1 shift to count for the first inspection of No. 2?—No, I would not allow that unless made within two hours.

33531. You suggest that there must be an inspection before the shift?—That is so.

33532. And you think two hours is quite long enough?—I think two hours is quite long enough.

33533. Then do you suggest one or more inspections during the shift?—I suggest two inspections during the shift.

33534. Then as to the next shift, would you take the last inspection of the first shift for the inspection within two hours at the beginning of the second shift?—I think if there were continuous shifts and the last inspection were made within two hours before the other shift followed on I would take that as good.

33535. (*Chairman.*) Then you say that a report should be made specifying the condition of the mine or district during every inspection. It is not necessary for the

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second inspection to be reported, is it ?—No; the intermediate inspection is not reported at present. It is in some places, but it is not compulsory, and I think it ought to be compulsory.

33536. Yes, that is my point. You go on to say that the reports of the inspections before the commencement of the shift should be immediately recorded in a book kept at the station for the purpose. You say, "immediately recorded." They are recorded, are they not, but they are not recorded at once; is that your point ?—Well that is a little vague. I think as a rule they are recorded at once, but I would have the man make his report as soon as he has finished his inspection.

33537. But that is not always so ?—No. At most places it is so.

33538. (*Mr. Ratcliffe Ellis.*) What you mean is that the report should be available for the people who are going to work; is that it ?—Yes, exactly.

33539. (*Chairman.*) So that the people before they go to work may see it ?—So that they may if they wish see the report of the fireman.

33540. The reports of the intermediate inspection should be recorded at the end of each shift. They are not recorded at all now ?—They are in lots of cases, but it is not compulsory and is not always done.

33541. Then you go on to deal with another important matter, and you say that firemen's or deputies districts are often too large ?—Yes.

33542. You say "often"—not "always" ?—No, not always by any means.

33543. You say that much depends upon local conditions, and it would be difficult to frame a rule restricting the size of the districts ?—Yes.

33544. Then you make a suggestion that when a fireman cannot comfortably travel and thoroughly examine his district in less than two hours, you consider it is too large ?—I do.

33545 Would that be often the case in your district ?—It would at some places, but at others it would not. At some of the large places they examine within the two hours and they make an examination twice during the shift by their deputies.

33546. But if you altered the rule to make it compulsory that this examination should not be held more than two hours before the shift, it would follow that any district must be too large which a deputy could not go through in two hours ?—That is so.

33547. (*Mr. Ratcliffe Ellis.*) That is quite so, but from the fact that he must make an examination within two hours of course it must be assumed that the district which he has to examine is not too large for him to make it within two hours ?—That is so.

33548. (*Chairman.*) Yes, that would follow. Then you go on to the question of the inspection of mines by workmen under General Rule 38, and you say that in a few instances in Yorkshire the workmen take advantage of the powers given under this rule. What do you mean by "a few instances ?"—I should rather modify that. At a good many of the large mines they do; I should think with regard to probably a third of the people employed the mines are inspected by the workmen.

33549. Then you say you have found the reports received of such examinations most useful and informing, and you would be glad if the inspections were universal. Do you think from your knowledge of the mines in your district that these reports are fair, or do you think that they err on the side of giving too rosy a view of the mines ?—I think they are very fair. They often point out dangers or occasionally point out dangers. But I do not get all the reports; I only get those which report danger. The Act does not require that they should be sent if there is nothing reported.

33550. So that you only get the class of reports in which there is some fault found with the management or some danger dealt with ?—In some cases they forward them even where there is no fault found, but that is not universally so, because the Act does not require it, and the people do not go beyond the Act.

33551. Should you say from your knowledge of the mines and of these reports of inspections which are put before you that the men feel they are at liberty to give an absolutely truthful report even although it is unfavourable to the management of the mine ?—I think so. They report what they see in Yorkshire. I am sure of it.

33552. And do you not think they are afraid of the management objecting ?—No; there is no reason why they should be. If a manager discharged a man he could get a job anywhere in Yorkshire—that is, a good man. They are very short of good men there; good colliers are not too plentiful.

33553. So that you do not think it would be against a man if a manager was to let it be generally known in the neighbourhood that a man was in the habit of making objectionable reports with regard to the management of a mine ?—I do not think so; it might be so—I cannot enter into the men's minds.

33554. But it has not occurred to you as being a thing that is likely to happen ?—I do not think it is a thing that is likely to happen at all.

33555. Then you say that copies of reports of examinations made under this rule should be forwarded to the inspector even where nothing of which to complain has been noticed ?—Yes.

33556. An inspector should have an opportunity of sampling the whole of these reports ?—Yes, I think so. He would then be in a better position to answer the question which you ask, as to whether they reported all they saw.

33557. What proportion of reports do you suppose comes before you ?—I do not suppose half, but I do not know, I have no means of telling, and I have really scarcely had time since I came back to go into questions of that sort.

33558. Then with regard to discipline and supervision, you say discipline or the want of it begins at the top, with the chief in command, and that if a manager is a thoroughly qualified man and a tactful disciplinarian and is given proper power by the owner or agent, it will be found that the subordinate officials and workmen are, as a rule, attentive to their duties, and that those who are guilty of neglect do not escape punishment ?—Yes.

33559. Then you object to a man being able to be appointed manager of any number of mines; you say that the Act permits a manager to undertake the management of any number of mines, and that this leads to cases where a manager takes so much work that he exercises very little underground supervision ?—Yes.

33560. You say that he relieves himself of responsibility by the appointment of under-managers, and thus the actual general supervision is done by men with qualifications presumably inferior to those intended by the Act ?—Yes.

33561. (*Mr. Ratcliffe Ellis.*) I suppose you mean the certificated manager ?—The certificated manager.

33562-5. You would limit the number of mines that the certificate should apply to ?—No, I would not limit it if they could show that they had a proper subordinate supervising staff.

33566. (*Chairman.*) But do you say that in many cases an under-manager with only a second-class certificate will frequently have charge of a mine ?—That is so. The manager will not go down; he has got other things to do. of course, those are only exceptional cases; but it can be abused in that way.

33567. (*Mr. Wm. Abraham.*) Do you know of certain cases where that abuse takes place ?—I have a case rather in point in hand now.

33568-9. So that there are occasional abuses on that side ?—Yes, on that side there are.

33570. (*Chairman.*) Then you say there are other cases where the owner or agent, without mining knowledge, unduly limits the power of the manager, but gives him more work than he can properly do, without an adequate subordinate supervising staff ?—Yes.

33571. You say this also leads to the employment of inferior men, for no self-respecting man with good marketable qualifications will take service under such conditions ?—Yes.

33572. Then you say that to provide against these evils the following rules are included in the rules relating to managers and their certificates, which recently came into force under the Indian Mines Act: regulations giving effect to the same principle might be embodied in the English Coal Mines Regulation Act ?—Yes.

33573. Then you quote from the Indian Mines Act, Rule 27 ?—Those are the rules relating to management.

33574. "For the purpose of Rules 28 to 54, every system of underground workings interconnected in such a manner that communication is practicable from any one part of the

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system to any other part by means of underground channels shall be deemed to constitute a mine. If access from one system of underground workings to another system is not practicable without coming to the surface of the ground, each system shall be deemed to constitute a separate mine?"—Yes.

33575. Then Rule 51: "Save as provided in Rule 52, no person shall act as manager of more than one mine?"—Yes.

33576. That is, there must always be a separate manager where there is separate communication?—Yes, except as provided afterwards, which is a very important proviso.

33577. The proviso is in Rule 52: "Managers holding first or second-class certificates may, at the discretion of the chief inspector of mines, be allowed to manage more than one mine, if the chief inspector is of opinion that the mines supervised by them are near enough to one another to permit of effective supervision being exercised, and that an adequate subordinate supervising staff is maintained at such mines." That would be your idea of what ought to be the law in England?—I would not put it in those words, but I should embody that principle. It would require very serious discussion from all points of view. I should embody that principle so as to prevent these abuses. It is only what is carried out in practice at the best-managed places at present. The Government have no power to stop a man managing any number of mines at present.

33578. (*Mr. Wm. Abraham.*) Notwithstanding that there may be 100 miles between them?—That is so.

33579. (*Chairman.*) Then you say that at many of the large mines in Yorkshire the following system of management is adopted: An agent or managing director is appointed for the mine or group of mines. He is a highly-qualified mining engineer in all branches of the profession. He appoints the managers and gives them reasonable latitude and power, and allots them under-managers and other officials. At such mines the discipline and supervision are generally satisfactory, the only weak point being that at some of them the deputies appear to have too large districts?—Yes.

33580. But that we have already discussed. Then you consider on the whole that the system adopted in the best of the large mines in Yorkshire is a satisfactory system?—I think so, distinctly satisfactory.

33581. And you wish that that system was general all over the district?—I do.

33582. You think there are some parts of your district where there are not sufficient managers, and where the owner interferes too much, and where the managers are not given a sufficient number of under-officials?—I think that is so.

33583. Then as regards the Special Rules, you say that the present methods of establishing Special Rules are clumsy and confusing, and give unnecessary trouble?—Yes.

33584. You say: "For the purpose of drawing up the Special Rules, a Mining Board might be constituted for each of the seven districts into which in my previous evidence I have suggested the kingdom should be divided. Each Board might consist of: (1) The chief inspector in charge of the district (*ex officio* chairman); (2) three representatives of the Coal Owners' Association; (3) three representatives of the Miners' Union?"—Yes.

33585. You add that when new rules are necessary they should be drafted by the Director of the Mines Department in consultation with the chief inspector in charge of the district to which they were intended to apply; this draft, put into a debatable form, should be sent to the Coal Owners' Association, to the Miners' Union, and to the owners of all the collieries in the district concerned, with the intimation that the rules would be considered by the Mining Board on or after a specified date, and that any objections or suggested amendments would be considered by the Board if received before that date?—Yes.

33586. Then you go on to say that when the rules were approved by the Board, the code should be forwarded to the Director of the Mines Department for submission to the Secretary of State for approval, and that when rules were approved by the Secretary of State, they should be published under his signature in the Official Gazette, and an official copy forwarded by the Director of the Mines Department to all the parties concerned?—Yes.

33587. You say the code should then have effect for the particular area or class of mines for which it was framed. All new mines commencing in the area should automatically fall under the rules?—Yes.

33588. You add that this method of establishing the Special Rules should take the place of both the present methods of establishment. What does that mean?—There are two ways of establishment: one on a proposition by the owner, and the other from the Home Office.

33589. You say that many of the present Special Rules could be included in the General Rules of the Coal Mines Regulation Act, which would be revised and simplified so as to make the present jumble of Rules, Orders and Amending Acts intelligible?—Yes.

33590. You add a rather important opinion. You say that provisions regarding arbitration, in case the parties establishing Special Rules disagreed, might be retained. Is not the dilatoriness of arbitration one of the principal objections taken to the present mode of establishment of the General Rules?—I think perhaps I have not clearly expressed what I mean on that point. I mean the principle of arbitration. There ought to be some means of settling it. I think I go on to say in my statement that it should be made simple, if it is possible in legal matters to make a thing simple. I believe there is a system now that is working rather well under the Factory Acts.

33591. Yes, you go on to say that the conditions regarding arbitration in case the parties establishing Special Rules disagreed, might be retained; but if such a thing is possible in legal matters, the procedure might be made simple and less costly?—Yes.

33592. What is your suggestion as to making the procedure more simple and less costly?—I think as a rule there would not be arbitration in a case of that sort. If you get seven practical men sitting round a table, I think they would settle what rules were necessary. At present I think we have far too many rules. If we could get the present rules properly carried out we should do very well, and they ought to be simplified. I believe that under the Factory Act when objections are made an inquiry is held. I have not read up the point, as I have not had time, but I believe it is working rather well, and that might be embodied in this.

33593. The Factory Act procedure is practically that a competent person is appointed by the Secretary of State to look into the matter, and to hear all the objections and all that can be said on both sides with regard to the rules; and when that competent person reports to the Secretary of State, the Secretary of State, without any arbitration at all, at his own will and pleasure, can decide what rules ought or ought not to be established?—Yes. I think probably the Secretary of State could decide as to a rule in that case where the Mining Board disagreed, but it would have to be a very serious disagreement. I think as a rule they would come to an agreement. Supposing you had from a district three members of the Coal Owners' Association and three of the Miners' Union men, and they talked the matter out with the inspector as chairman, I think they would come to an agreement on a question of Special Rules. At all events, it would let the fresh air of publicity blow over the matter.

33594. Then you are not prepared to say whether you would stand by your opinion that in case of difference arbitration should be resorted to?—No.

33595. Or whether the procedure under the Factory Act should be adopted?—There must be some means of deciding when they disagree, and that means ought to be as simple as possible.

33596. You would not leave it to the Secretary of State to decide?—I should be rather inclined to do so.

33597. (*Mr. Wm. Abraham.*) After it had been thoroughly ventilated by the Mining Board?—After it had been thoroughly ventilated by the Mining Board.

33598. With an independent chairman sitting there?—That is so.

33599. (*Chairman.*) The independent chairman would be the chief inspector of the district?—The chief inspector of the district.

33600. You now go on to the investigation of accidents. You say that in some districts practically all the reported accidents appear to be investigated by Government inspectors. This is impossible in districts where the number of inspectors is small and the number of accidents great?—Yes.

33601. You add that you are of opinion that all accidents which are not obviously trivial should be so investigated?—Yes.

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33602. You say that the public inquiry into fatal accidents takes place in the coroners' courts. These are often held where the accommodation is unsatisfactory, and the short notice required by the Act is an inconvenience so far as the inspectors are concerned. If the inquest is delayed, the relatives of the deceased are pained and cannot complete the funeral arrangements ?—That is so.

33603. Then do you, or do you not, suggest that the notices where possible should be longer ?—I think if the bodies could either be viewed and the case adjourned, or the viewing of the bodies could be done away with altogether and an order for burial given, then the coroner's inquiry might be made more deliberate and more latitude might be given for asking questions.

33604. You do not see any reason why the inquiry should necessarily take place before the funeral at all ?—I do not. It is very distressing sometimes where the funeral is delayed.

33605. Then you say that in that case, supposing there was more notice, the proceedings could be made more deliberate and formal, and probably a hint from the Secretary of State would be sufficient to induce the coroners to make a complete inquiry ?—That is my opinion.

33606. That is a suggestion that the coroners do not make a complete inquiry at the present time ?—That is so. In some cases they take very wide views and do make a complete inquiry, and they allow any question to be asked with the object of preventing a repetition of the accident, for instance. But there are other coroners who take a different view. They say they are there to find out whether anyone is to blame, and what was the cause of death ; and having found that out, they leave it to the inspector to go into the other questions. That is not the case with most coroners in Yorkshire. They are very good. They allow us every latitude, most of them.

33607. So that you are satisfied with what takes place in Yorkshire ?—In some cases—not in all.

33608. Then you know of some cases where you consider the proceedings at the coroner's inquest have not brought out all the facts of the case which you consider ought to have been brought out ?—That is so, from our point of view—not all we would like to see discussed and decided.

33609. Then you say that Section 45 of the Coal Mines Act, which provides for the formal investigation of accidents, is, for practical purposes, a dead letter ?—Yes.

33610. During your 24 years' service as an inspector of mines you have taken part in only one such inquiry ?—Yes.

33611. Then do you suggest that the provisions of Section 45 for a second inquiry should be made use of more than they are at present ?—If you could have the matter properly threshed out before the coroner, I am satisfied with one inquiry ; but I think that those provisions might be retained for cases where there has been no death, for instance. Serious cases in which there has been no death ought to be inquired into formally.

33612. Would you suggest that the Secretary of State should remain, as at present, the sole authority to order such an inquiry, or do you think that persons, for instance, who are damnified by the report of the inquest should be entitled to ask as of right for a second inquiry, or do you think that the realtives of the person who is dead ought to have the right ?—I think I should leave it to the Secretary of State.

33613. You would leave it to the Secretary of State entirely, as at present ?—Yes.

33614. Do you know of any case where a second inquiry has been asked for, and, in your opinion improperly refused ?—None have come under my immediate notice.

33615. Then you go on to deal with the Board of Examination ?—Yes.

33616. You say that first and second-class certificates for managers and under-managers of mines are freely granted at present and that some of the successful candidates have no thorough practical knowledge and others are deficient in the scientific part of their profession ?—That is so.

33617. Do you think that the examination is unduly lax ?—I think in some cases it is, both from the practical and scientific point of view.

33618. Then you add that owners of mines for the most part select good men, but there is a distinct tendency in some quarters to be pennywise and to appoint inferior men, who, though they fulfil the requirements of the Acts, have very poor qualifications. You have known that to be the fact in your district ?—I have known that to be the fact.

33619. Consequently you think it extremely desirable that the qualifications for passing this examination should be somewhat screwed up ?—Yes, by the formation of a Central Board of Examination.

33620. You say that the time has now arrived when the scheme for the examination for Managers' certificates should be thoroughly revised with the object of establishing uniformity and the better testing of the practical as well as the theoretical knowledge of the candidates ?—Yes.

33621. Then you suggest a Board of Examination which should be constituted for the whole of the United Kingdom and appointed by the Secretary of State, and which should consist of "(*a*) The Director of the Mines Department (*ex officio* President). (*b*) Three persons nominated by the Coal Owners' Association. (*c*) Three persons nominated by the Miners' Union. (*d*) One person nominated by the Institution of Mining Engineers. (*e*) One person nominated by the Colliery Managers' Association. (*f*) One University Professor of Mining." That is ten persons ?—Ten persons.

33622. Then you say that the Board should be a controlling rather than an examining body : they would draw up the regulations for the conduct of the examinations, and appoint the examiners ?—Yes.

33623. They should not be examiners themselves ?—No, I would not let them be examiners themselves.

33624. And they should take steps to insure that the standard of examination was the same in each district ?—Yes.

33625. They would consider the examiners' reports and grant certificates to such candidates as had, in their opinion, qualified ?—Yes.

33626. You add that the examinations might be held at Glasgow, Newcastle-on-Tyne, Sheffield, Birmingham, Manchester, Cardiff and London once a year, at times convenient for each centre ?—Yes.

33627. (*Mr. Ratcliffe Ellis.*) You have had considerable experience in England as an inspector, and you have also been out to India ?—That is so.

33628. So that you have the advantage not only of knowing the condition of things in England, but in the Indian coal-field ?—That is so.

33629. With reference to Government inspection, what do you consider is the object which should be sought for by Government inspection ?—I think first of all that there ought to be enough to ensure that the Act is fairly uniformly observed, and that any serious irregularities will be detected. I also think that an inspector ought to have at least as good qualifications as a manager.

33630. I want to understand what the object is : it is to see that the Act is carried out ?—Yes, and that the mines are properly managed.

33631. In your view for the inspector to do that, it is not necessary that he should be at the mine every week ?—I do not think it is desirable.

33632. Do you think that by a sample inspection of a mine you can form an opinion as to how the Mines Act is being carried out generally throughout that mine ?—I think by repeated samples you can. I would not say that by going and just seeing a district to-day I could pass an opinion upon a mine, but I should have a very good idea of what was going on even then.

33633. But by repeated sampling of a mine you would have sufficient idea as to whether the Mines Act was being carried out or not ?—You would have a very good idea after two or three visits. Then probably if you were not thoroughly satisfied you would have a more extensive inspection made of the mine. That has been my practice.

33634. That is, to see that the Mines Act is being carried out. But is there not another duty of an inspector namely, that if he finds any dangerous practice to which there is no specific provision of the Mines Act applicable his duty is to call attention to that and take means to have it stopped ?—Yes. He has power of giving notice if the manager will not remedy it. In practice as a rule the managers remedy it.

33635. In order to carry out this inspection, your view is that the man who is to do it must be a highly-qualified man ?—I think it is essential.

33636. What assistance do you expect to get from assistant inspectors ?—I expect that the inspection which

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they would make should be in all respects as good as I should make myself.

33637. And you think that to be of use they ought to be as qualified for the work (except with regard to experience, which they would not have immediately upon employment) as the chief inspector?—I think so.

33638. In the suggestion which you make for the future you would have these additional inspectors?—Deputy chief inspectors.

33639. That is all: would the assistant inspector do the same work as the inspector?—Yes, the same that the assistant inspectors do now.

33640. Therefore it would not be merely some man who could examine to see whether a place was free from gas, or whether the timbering was right, but it would be some man who was sufficiently competent to pronounce an opinion as to the general condition of the mine?—Yes, or who would go and investigate an accident and be able at an inquest to answer any mining engineering questions which might be put to him, which crop up at inquests.

33641. And also to afford any advice which might be necessary to the management?—Yes.

33642. Also that he should be able to notice whether there was any dangerous practice, which, although not expressly provided for in the Act of Parliament, ought to be stopped?—Yes, or indications of danger.

33643. That he ought to be qualified to do all that?—I think so.

33644. If he is not qualified to do that, do you think inspection would be of any use?—From my point of view it would not be. I would not say that it would be of no use but it would not be so valuable.

33645. With reference to the persons who should be appointed inspectors, do you see any objection to the appointments being open to anybody having a first-class certificate and passing the Home Office examination?—The only objection I see to that is in regard to difficulty as to character and physique; you may get a man who is not strong enough either in character or body for the position. There are also other qualifications that occur to one, if a man was coming into a public service, which are desirable. I think I should not throw the thing absolutely open and give it to a man who came out with the top marks, because he may not be the best candidate. He may be a man who can pass an examination and nothing else.

33646. But, of course, so far as the physique is concerned, that might be ascertained by medical examination?—Yes, that can be ascertained by medical examination to a large extent.

33647. What I want to see is whether it is possible to get rid of the nomination altogether, and to have an examination open to every person who should have the necessary qualifications?—The only objection that I see to that is that you might not get the best man if you took the man who comes out top and is good at examinations.

33648. That is your view?—That is my view.

33649. Subject to that, you would see no objection to it being thrown open?—I would not, subject to that.

33650. Then, of course, it would relieve somebody from the difficulty of making a selection?—That is so.

33651. I suppose a man to be an inspector must have had some practical experience?—I think that is essential.

33652. Then what is your view as to that practical experience?—It is a little difficult to give a definition on the spur of the moment, but I should say he ought to have had experience in some form or another of most of the work in a pit; for instance, he ought to know all about the work in the face, but it ought not to end there; he ought also to know how to arrange brattice to keep gas off; he ought to know how to build dams to keep fire back, and he ought to know how to timber very difficult ground, as through a heavy fall in a road; in fact, he ought to know how to do, and to do with his own hands, when necessary, any operation of that sort.

33653. You must not consider me rude in putting this question to you: in what way did you acquire that experience?—I began by being down the pit all day and doing all sorts of things—working about the pits. I used to go down at two o'clock in the morning when I first started.

33654. And you saw all that was going on?—I saw all that was going on, and did a good deal of it too.

33655. Is it necessary, in your view, that a man should qualify himself by actually working as a collier at the coal face?—I do not think it is absolutely essential. I may give you a case where I had three inspectors acting as stonemasons about six months ago; one of them had been a working man, but the others had not. They were building dams with their own hands.

33656. (*Mr. Wm. Abraham.*) But how is the inspector to possess the experience which you think necessary unless he is to have the opportunity of working with his own hands?—He can work with his own hands if he likes in a pit. You will find that the more energetic young men do help; they help in digging gob-fires out, and they help in building, and they take up the pick when they are going round.

33657. Then what you mean is this: it is not necessary for him to be engaged as a collier, but it is necessary that he should have an opportunity of practising that kind of work?—I think so.

33658. Would a man who has never done anything of that kind, but who has simply done the work of measuring the air as a surveyor, be qualified?—I do not think as a rule he would be, but he may be. If he had simply gone round measuring the air I do not think he would be qualified.

33659. (*Mr. Ratcliffe Ellis.*) I do not suggest that he would be. It is suggested here that before a man is qualified he should have five or six years actual working as a collier at the face?—I beg your pardon, is that for all appointments?

33660. For under-manager, inspector, fireman or any other person connected with the management or supervision of a mine. Supposing that was the case, you see a man begins in the mine, and it is a considerable time before he begins to work at the face. He cannot work at the face until he is 20 or 21?—That is so.

33661. Then five or six years working at the face would bring him to the age of 26 or 27, I suppose?—Yes.

33662. When is this man to learn the measurement of the air and other duties which are necessary to be discharged by a manager or to be supervised by an inspector in a mine?—I think if a man, say, had only begun as a driver and then worked as a loader, and then in a stall, he would not be what I should call a practical pitman altogether. He would have a knowledge of the working of the face and of his own place, but he might be in that place for years and never see another place.

33663. Do you think a man with a qualification of that sort is a man to whom the lives of the men in the mine ought to be entrusted?—Not unless he has other qualifications as well.

33664. And other qualifications probably of more importance than that?—Yes—of equal importance, at all events.

33665. Therefore, in your view, the training which you yourself had down the pit, although you never worked as a collier, is sufficient to give you that practical experience to enable you to supervise the management of the mine?—I think so.

(*Mr. Wm. Abraham.*) And it is necessary?

33666. (*Mr. Ratcliffe Ellis.*) That is to say, you think that is the experience which would be necessary to qualify, and sufficient to qualify a man for that post?—Yes; it would not disqualify a man who had worked at the face. A lot of our best managers have been colliers and they come on later in life. I would not for a moment say anything against the experience which a man gets at the face; I think it is very valuable.

33667. I would not say anything against it for a moment, but although it would not disqualify him, it would not necessarily be the only qualification?—No; it would not necessarily be the only qualification.

33668. You say you would have all the inspectors equally qualified?—That is so.

33669. You suggested that there should be a Mines Department at the Home Office?—Yes. I think that is practically decided from what I see in the papers.

33670. Then would the head of that department be the chief inspector, or would he be a different official?—I think that would have to be left to the Secretary of State. I do not know that I have any right to pass an opinion upon that. I do not think he ought to do anything that would interfere with the authority of the district inspectors.

33671. Do you think that that official, whoever he is should interfere with the work of the present chief inspectors?—Not except as regards uniformity and proper

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discharge of duties. I do not see how you could prevent him interfering to a certain extent, but I would not lessen the authority of a chief inspector in charge of a district.

33672. Do you think that if there were anything done which lessened the authority or interfered with the position of the chief inspector that would be undesirable ?—I think that would be a great mistake. I would raise his status rather than lower it.

33673. With regard to remuneration, in your view everything has risen except the inspector's remuneration, which has stopped very much where it was years ago ?—That is so.

33674. In your opinion there ought to be such remuneration as would attract the best men ?—Yes, I think that is desirable.

33675. And that should go through all the classes of inspectors ?—Yes, all.

33676. You think their work might be relieved to a certain extent by the clerical work being taken away ?—Yes.

33677. But do you not think it is very desirable that all the statistics of the district should pass through the hands of the chief inspector ?—Yes. In India I had them all compiled by clerks, but I checked all the figures ; I went through them myself.

33678. Although he should be responsible for them, and they should pass through his hands, because it gives him a very important view as to the condition of the district ?—Yes.

33679. Yet he should be relieved from part of that duty ?—Yes ; for instance, he might be relieved from writing all the names in the book and writing the figures after them. He can check them afterwards and go through them, but with regard to all the detailed clerical work, I do not see that a man with those qualifications should have to do it. No other man in such a position has to do such work.

33680. With reference to the establishment of Special Rules, would you disestablish the existing rules ?—I think the best plan would be to make a clean sweep and revise them altogether. It strikes one now that we have a tremendous jumble of Special Rules and Orders, so that a good many of the managers cannot understand where they are.

33681. But of course the men and the managers know these rules pretty well ?—Yes.

33682. And that might cause rather a danger ; if you were to disestablish these and start afresh it would take some time to learn the new ones ?—A good many of the rules are in a sense superfluous, I think ; they are not observed. You find most of the prosecutions for breaches of the rules are under two heads ; one is that the men shall not do an act which is calculated to endanger life or property, and the other is for not obeying orders.

33683. You say the Board should be three representatives of the coal-owners—the employers—and three representatives of the Miners' Union : that is six. Then the Chief Inspector of Mines : that is seven ?—Yes.

33684. And who else ?—That is all for the Mining Board which is to frame rules.

33685. What is to become of the men who may not be in the Union ?—I have provided for the rules being sent round and published.

33686. But so far as the Board is concerned, who is to represent the men who have no representative on the Board ?—They are not represented.

33687. They would have no *locus standi* on this Board ?—No. The same would apply to the coal-owners, too ; but the inspector, who is an independent man, would listen to any representations.

33688. I see that in your rules in Yorkshire you have rules applying to the under-managers and deputies, underhewer, enginewright, enginemen, banksmen and hangers-on, brakesmen, incline-men and a number of others ; and then you come to a limited number of rules for miners, workmen and others ?—That is so.

33689. Is there to be anybody on the Board representing the various classes of employment, managers and men, who are not usually in the Miners' Federation ?—I think the Coal Owners' Association and the Miners' Union are so strong now that they represent everyone, and those they do not represent, the inspector would represent. I have considered it from that point of view, but there are so few now outside either the Union or the Association that I think they would be represented by the inspector, who would listen to any representation they made.

33690. Supposing that on this Board which establishes Special Rules there should be a difference of opinion between the three representatives of the owners and the three representatives of the workmen, then would you place the sole decision in the hands of the inspector ?—I would give the other side the right to appeal to the Secretary of State or to an arbitrator.

33691. Then if the inspector decides either on one side or the other, you would give the dissenting party the right of appeal ?—I would.

33692. With regard to that appeal, you say you have not quite thought out the authority yet ?—No.

33693-5. But you rather favour the provisions of the Factory Act ?—Yes, I rather favour them ; I believe they are working well. I should like to know more about the working of it, first of all.

33696. Here you have got representatives of the owners, who are supposed to be competent men and who understand mining as well as the inspector ?—That is so.

33697. At any rate, they think so ?—Yes, they do.

33698. And then you have the three representatives of the workmen, and you have the inspector. Now, supposing there is a division of opinion, and the matter comes before the Secretary of State ?—Yes.

33699. Of course, he would be helpless, in all probability ?—Yes.

33700. Then he is to be guided by the advice given to him by the officials at the Home Office ?—That is so.

33701. So that really you do place in their hands the fixing of those rules ?—It is putting rather into form what is now the practice, except that you make it more definite, and you have a little more publicity. As a rule, if we are establishing Special Rules, we let the owners and the miners know. Supposing they want to revise a Special Rule, they have a meeting ; but it is not quite so formal as what I propose they should have.

33702. This suggestion of yours is to simplify the present procedure ?—That is so.

33703. Now I want to suggest to you another scheme, and that is this : that it should be left as it is at present, that the owners may propose a rule, or the Home Office may propose a rule ?—Yes.

33704. But that if it is proposed by the owner, then, before it is established it should be advertised, as in the Factory Rules ?—Yes.

33705. And everybody interested, whether it is a collier or the Miners' Federation, or some owner who is not in the Coalowners' Association, should be able to object to it ?—Yes.

33706. And if that objection is not removed, that he should be entitled to go to arbitration, but instead of having two arbitrators and an umpire as now proposed, it should be an arbitrator appointed by a judge of the High Court, who should decide the question finally. You see what I suggest is this, that there is no harm in proposing a rule ?—No.

33707. But before it is established as a rule to bind anybody, anyone interested should have an opportunity of expressing their objection to it ?—I quite agree.

33708. Then you think a system of that sort would meet your views ?—It depends upon how it worked. I have not really considered that carefully enough.

33709. But I want to draw the distinction between these : it is suggested that before the rule is even proposed, the coal-owner, if he wishes to propose a rule, must invite the men to discuss it with him ?—Yes.

33710. I do not quite know what men he is to invite, but he is to invite some of the men—I suppose the men at his colliery—to discuss that rule with him. But whether they agree to it or not he may propose the rule ?—Yes.

33711. I suggest that that is an unnecessary and useless formality : that he should be allowed to propose his rule, and that before it is established anybody interested should have a right to object, and that if there is a division of opinion amongst them which cannot be removed by meetings, if they choose to meet together afterwards, then it should go to an arbitrator appointed, in case of difference, by a judge of the High Court ?—I think the men ought to know that a rule is to be proposed, and what the nature of it is.

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33712. Why?—Because I think they ought to have an idea of what is expected, and they may have views on the subject.

33713. They have an opportunity before it is established. Take the case of the Home Office. Suppose they wish to propose a rule, are they not to be allowed to propose the rule until they have communicated with the men and said "We want to propose this rule?" Is it not sufficient if they propose the rule, that anyone interested, owner or employee, shall have a right to object to it?—So long as everybody concerned in the rule knows that it is going to come on and be discussed, I am satisfied: but I want to make the process afterwards as simple as possible. I want everyone to know that a certain rule is going to be proposed and put into force.

33714. That a certain rule is going to be established?—Yes.

33715. I agree, and I go further and say that it should not be established until everybody has had an opportunity of having their say about it?—Yes, I agree.

33716. Then the only thing upon which we differ is the way in which any differences should be settled afterwards?—That is so. I thought this would be a sort of Conciliation Board of men and owners who should agree on what the rule should be.

33717. You know, and it is a fact, is it not, that from the men's point of view many questions that arise upon these rules are not questions of safety, but questions of wages?—It would often arise.

33718. If that should be the question to be discussed by this Board, it would not be likely that the Board should come to any conclusion about it?—If they discussed the wages question, I think you might rely upon it that they would not agree.

33719. If the rule which is going to be proposed was a rule which might affect wages, I suppose it would be a mere formality having this Board to consider it?—No, I do not think it would. The rules would be put in a debatable form.

33720. It is a new Conciliation Board, really?—Yes.

33721. However, you would agree with me that if the men, or rather, if anyone interested—I do not wish to talk about the men as apart from the employers—have a full opportunity, before the rule is established, of knowing what it is, you are satisfied?—Yes.

33722. The only thing is that you want the method of dealing with differences to be simplified?—Yes.

33723. (*Chairman.*) But are you satisfied? I ask you that, because Mr. Ellis puts it to you that you are satisfied if, before the rule is established, everybody has an opportunity of having their say. I put it to you, is it not desirable that everybody should have an opportunity of saying their say, not only before the rule is established, but before the mine owners have gone to the length of putting it forward? Is it not desirable that the men should be consulted at a previous stage of the proceedings, because when once the mine-owners have met together and consulted among themselves and consulted no one else and have put forward a rule, is it not rather a matter of pride with them that they should stick to the rule in the form in which they put it forward, and would it not be desirable, before they have absolutely decided to ask for the establishment of a particular rule, that the drafting of it should be considered both by masters and men?—That is my view. I rather understood Mr. Ellis to say that.

(*Chairman.*) That is exactly what Mr. Ellis does not understand, and does not wish.

33724. (*Mr. Wm. Abraham.*) In all your experience where employers and their workmen have been engaged in discussing these matters, has a wages question been allowed to be raised?—No, it has not been raised.

33725. (*Mr. Ratcliffe Ellis.*) With regard to the duties of firemen and inspection under General Rule 4, do you think that the districts are too large?—I think in some cases they are. I think a man is hard pressed.

33726. You have suggested that where a man cannot get round in two hours that that should be taken as a measure of his district?—I think that is a rough way of measuring it.

33727. It would depend upon the man a good deal?—Yes, and the local conditions.

33728. Is there any way by which it could be put into a rule. Can you suggest any words to provide for his district not being too large?—No, it is very difficult to put it into a rule.

33729. It would have to be left to the management?—Yes.

33730. Have you had any reason to suppose that where the districts are not too large the firemen have had to do other work than examining?—I think that there are cases where they have to do.

33731. That should not be allowed you think?—No.

33732. Is there any rule you can suggest to secure better supervision?—I do not think so, except making the management itself of a higher class. I think it has to be largely brought about by public opinion.

33733. You think that the districts should not be too large and that the men should have nothing to do but the work of inspection?—I think they ought to confine themselves to that work.

33734. Do you think in your district it is the case that the firemen have other duties to perform than mere inspection?—No, not very largely; only in a few cases.

33735. In the best managed collieries?—They do nothing else but examine.

33736. Your suggestion would be merely bringing up collieries to the standard of the best?—Yes, that is so.

33737. With reference to General Rule 38 and the examination do you think that is a useful provision?—Yes, I think it is a useful provision.

33738. What is the object of that examination. May I suggest that it is the same as that of the Government inspection, but it is to assure the men working in the mine that they are working under conditions that are safe?—Yes.

33739. That is the object of it. I put it to you whether that object would not be more likely to be better attained by the examination being made by some of their own number under the same conditions than by outsiders?—I think as a rule it would be better attained.

33740. Do you think that there is anything in the suggestion that the men do not examine for fear of the consequences?—I think there is certainly not in Yorkshire.

33741. The Miners' Federation exists in Yorkshire and other parts of the country?—Yes.

33742. I daresay you have heard that they have taken up cases where a man is said to have been victimised or where he has been unjustly discharged?—I have heard of cases of that sort.

33743. They would be interested in a case where a man was discharged in consequence of making a bad report?—Yes.

33744. You do not think in Yorkshire that there is any reasonable ground for such a fear?—No.

33745. It is suggested that this right of examination of coal owners' premises should be extended not only to men who are employed in his mine, as is the case now, but to anybody who has been a practical miner at any time in his life. Do you think that is a desirable alteration?—No, I do not think that is very desirable.

33746. You would not do that?—No.

33747. It is suggested that check weighers should be eligible for this work of examining?—In Yorkshire most of the check weighers are not practical miners.

33748. (*Mr. Smillie.*) Do you say that from your own knowledge?—Not by asking the men but it is a sort of general impression I have.

33749. We know that it is not the case?—I think it has been said in evidence by the miners' representatives that most of them are not. I give that for what it is worth. At all events a number of them are not.

33750. 80 per cent. of them?—In Yorkshire.

33751. Yes.—I did not know that.

33752. (*Mr. Ratcliffe Ellis.*) The value of this inspection to you would be quite as much if made by men who have to work under the same conditions, they report upon as if made by check weighers?—Yes.

33753. With reference to the supervision by the management, you think that a manager should have rather fewer duties: that is, that the area of his supervision should be restricted?—Not in all cases—in fact not in most cases. In some cases it is satisfactory.

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33754. You suggest for consideration something on the Indian method ?—Yes, I suggest for consideration something on that method.

33755. You think in some of the best collieries in Yorkshire the practice does not differ very much from that ?—No, the practice is very satisfactory.

33756. (*Mr. Cunynghame.*) You are aware, of course, that a very large proportion of the accidents in mines are due to falls of roof and sides ?—Yes.

33757. You are also aware that Special Rules were made for timbering at stated distances, the distances to be named by the manager of the mine ?—Yes, that is so.

33758. What is your opinion as to the cause of this number of accidents and how it could be prevented ?—I think stricter supervision would help.

33759. It comes to this, there is a certain amount of carelessness in the men at work ?—Both in the supervision and the men at work.

33760. There should be greater supervision, and you think greater care, too, in the setting of timber ?—There are a lot of cases of accident that ought not to happen from drawing timber.

33761. How can that greater care be brought about: how can people be made to take greater care ? Would it be necessary to have prosecutions or fines, or anything else ?—I am more in favour of prosecutions than fines.

33762. Would it mean a large number of prosecutions to get rid of this carelessness ?—I think you can only get rid of it by educating public opinion against bad methods.

33763. You do not think that prosecutions would do much ?—I think they would help very much.

33764. Do you mean that there should be more of them ?—I think in lots of cases that there should be more, but the practice varies enormously in my district. Some managers always prosecute: others never do. They fine a man or take some other means of punishing him, or none.

33765. (*Chairman.*) Do you find that there is much difference in the maintenance of discipline in those mines where they prosecute and where they fine ?—I think the discipline as a rule is stronger where they prosecute.

33766. You have gone into that ?—Yes. It is not always stronger.

33767. You have gone into that question carefully ?—Yes.

33768. You do not think that is so always, that there is a difference always in favour of prosecutions ?—I am in favour in a serious case of having a prosecution.

33769. (*Mr. Cunynghame.*) Are you in favour of the abolition of fines altogether ?—No, I do not think I would go quite that far, but I would restrict them.

33770. In the future do you look forward to a considerable reduction of loss of life from those falls of roof ?—I think we may hope for that.

33771. For the last 8 or 10 years the reduction has not gone on fast enough really to content you ?—No, not at all. The industry has been expanding so enormously. I do not think you will get any great reduction until it settles down again.

33772. This great expansion is due to the opening of a number of new mines ?—Yes, the extraordinary influx of men into the mines is due to that.

33773. Will that expansion go on or not ?—I think it will go on for some time. It certainly will in Yorkshire.

33774. I should not like to forecast, because it is dangerous, but can you give us an idea of the output in 10 years time ?—For the whole Kingdom ?

33775. Yes.—I would not like to propheoy that.

33776. Do you think there will be a considerable extension ?—I think there will be quite 25,000,000.

33777. Of extension ?—Yes.

33778. That is extended by one-eighth more in 10 years ?—Yes.

33779. That very extension itself will be a cause, to a certain extent, of more accidents from falls ?—I think it will, owing to the influx of new men into the pits. My own view is that it takes two generations to make a really first-class miner. Although a man may enter the mine as a boy, if he is not of a mining family and mining people, he seldom becomes as skilled and as careful a miner as those who are really brought up in it and whose fathers are miners.

33780. Your view with regard to accidents from falls is to a large extent in the circumstances that they are inevitable. Is that so or not ?—I think that is so. I am afraid it is.

33781. But you suggest more prosecutions and more supervision ?—I have suggested more supervision in my previous evidence by reducing the hours of the deputies. I think that would help largely.

33782. (*Mr. Wm. Abraham.*) I think, without basing your opinion upon your knowledge of employers and workmen, you are still of opinion that it would be better, as the Chairman put it, for the employers and workmen to meet in the first instance to discuss new rules ?—That is my view.

33783. It would do away with any unnecessary loss of time ?—It takes a long time to get through necessary rules now.

33784. I think you told us you would have the same qualifications for each class of inspector ?—I would.

33785. Do you think that to be essential ?—I think that ought to be essential, for one reason you would widen the number of men from whom you would choose the chief inspectors.

33786. You are of opinion that in each case a man should have a practical knowledge and experience of work in a mine ?—I think he ought to have a thorough practical knowledge and be a good practical pitman.

33787. A good practical pitman ?—Yes, I do think so.

33788. Are you aware that some of our present assistant inspectors have never done any practical work in the mine ?—I have not gone into the question of the qualifications of my colleagues, and I think it is a question I would rather not answer if you do not mind. If the Chairman will allow me, I will not answer that question. I do not think it is a question I ought to answer even if I have the knowledge of it. I should be obliged if Mr. Abraham would not press it.

33789. No, I will not. You have given your own view ?—Yes. I would rather not express any opinion on my colleagues.

33790. Your view is that men of high technical knowledge have a great advantage in partaking in examinations over the practical men who have not that technical knowledge ?—Yes, that would be so.

33791. You would not be surprised to find that some of those men, because of their high technical knowledge, in the absence of practical knowledge, have been selected ?—It is quite possible a man might get selected.

33792. You have stated that a sample inspection once a year is satisfactory ?—A large mine, of course, would be visited in the ordinary course of things a great deal oftener than once a year, but I think every mine ought to be visited at least once a year.

33793. That is a different view from what I understood you to say. A sample examination of all mines once a year is not satisfactory ?—No, because you are visiting the mine for the purpose of investigating accidents as well. Nothing may happen at the mine during the year to call the inspector there, and then I think it ought to be visited during the year.

33794. I have not in my mind visiting or examining in case of accidents, but the real examination. Assume that no accident has happened, I think, in answer to Mr. Ellis, you modified that opinion and said that repeated sampling would be necessary ?—Yes.

33795. In what kind of collieries do you consider repeated sampling necessary ?—A large dangerous colliery where there were several seams working. You ought to have a knowledge of each seam.

33796. Do you know that in several collieries the character of certain sections has changed during 12 months ?—Yes, that is so.

33797. So that the sample of one part of that mine could not be satisfactorily taken to represent the condition of the whole mine ?—It is quite possible there might be differences.

33798. If the general character had thoroughly changed, of course that would be so ?—Yes, but it would not alter the character of the management. That is my most important point of view. How are these mines being supervised and managed ? That is the most important duty of the inspector, to see that is carried out properly.

33799. If his duties are reduced down to that, is it sufficient to see he does his duties once a year ?—No. He does not know when that mine may be inspected. It may be inspected at any moment. If you went to a mine and found a district not properly ventilated, the

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manager would be absolutely responsible, and if he knew that the inspector was coming the day before, he could not make that right—he could not make a drastic alteration of his ventilation.

33800. That is doing away with the idea created in my mind that visiting these mines once a year would be satisfactory?—Yes. If you are not satisfied with your sample then you go further into the matter.

33801. You would not put it down as a rule that once a year is sufficient?—No; I would make no rule.

33802. Do you know any reason why so few of the workmen's examinations are made in Yorkshire?—There are about one-third made. I think there are as many as in other districts. I think it is about one-third. I should say that collieries employing 40,000 people are inspected by the workmen. I do not know the reason for not expanding it.

33803. Do you know that they are not putting that rule into force as a fact?—It is not put into universal force. That is a fact.

33804. Have you seen workmen's reports brought as evidence of the character of mines at the coroner's inquests?—No, I do not remember that being done; not in Yorkshire or in Staffordshire.

33805. Do you think, holding the view you do about the character of inspection, that anything turns upon the opinion of those men when an explosion takes place?—I think it is valuable to have all the evidence you can, when an explosion takes place, from anyone.

33806. The evidence of these men would be valuable?—Yes, they would be valuable witnesses.

33807. Because they have made a thorough inspection?—That is so.

33808. And because they are capable of doing it?—Yes.

33809. Do you not think it is in that direction, real examination of the working places, that we mostly require additional inspection?—No. I think you require additional supervision in the working places, which I have stated with regard to the firemen's districts; but I do not think that the Government ought to be responsible for inspection by men who are not as qualified as the managers. A man inspects under Rule 38 and he is responsible to the men, but the Government take no responsibility for his inspection as to whether it is thorough or not, or whether he makes a true report, but if a man is under the Government he has to make his report and examination, and he is officially responsible to the Government, and the Government are morally responsible for his appointment.

33810. Supposing a practical miner by examination possessed a certificate of competency, would that not be a qualification high enough for this grade of inspector?—No; I think he ought also to go through another examination before he comes into the Government service.

33811. What for?—To see that he is thoroughly competent to discharge those duties.

33812. Of simply seeing that the law is carried out?—No, simply seeing you are getting the best men into the service. I do not mind how it is done.

33813. You add to his duties, you are to have the best men?—I want to see the best men in the service.

33814. Not to see simply, as Mr. Ellis puts it, that the law is carried out?—I think that is one of his duties.

33815. No doubt?—His principle duty.

(*Mr. Ratcliffe Ellis.*) I put another duty which he has to perform: to call attention to any dangerous practice which may not be provided for in the Coal Mines Regulation Act.

33816. (*Mr. Wm. Abraham.*) Has he a power of advising?—No, the Act gives him no power, but in practice he talks things over.

33817. If he did advise, he has no power to order his advice to be carried out?—No; but if there is a really serious danger that the manager will not remedy, and the inspector thinks he has power to give notice for that danger to be remedied, there is a section which provides for that.

33818. Supposing that in the interim, between his asking or advising or recommending the manager to take a certain course—improve the ventilation or change the lamps, put in safety-lamps instead of naked light—an explosion takes place?—Then the manager is in a very serious position, but in a case of that sort it would be probably a violation of the Coal Mines Act, to begin with—insufficient ventilation. It would not, perhaps, be strong enough in the first instance to justify a prosecution, but the inspector would write and draw the managers attention to this defect. He follows that up by a second visit, and if not put right then, he prosecutes.

33819. Supposing that second letter goes and nothing is done and an explosion takes place?—Then the manager is in a very serious position.

33820. Do you think that a manager ought to be placed on his trial in any way?—He would probably be prosecuted, but every case would have to be judged on its merits. I would not lay down a definite axiom.

33821. I think you give it as your opinion that all the coroner's examinations have not proved to be satisfactory to you?—That is so.

33822. And that in some cases within your knowledge some other kind, or a more direct inquiry, would be advisable?—Yes, that is so.

33823. What in your opinion would be the circumstances justifying the Home Secretary putting in force Rule 45 that provides for a second inquiry?—I think if you had the coroner's inquests made more efficient than they are now, it would be very seldom necessary to put it into force. I do not see the object of having more than one inquiry if you can avoid it, and, as a rule, the coroner's court is satisfactory if the coroner takes enlightened views of things, because the jury are usually men of all kinds, practical miners and different classes of men. There would be two or three practical miners on the jury or, perhaps, four or five practical miners, and there would be different men as well.

33824. (*Chairman.*) We were told the other day by a representative of the miners that there was the greatest possible difficulty in getting practical miners on to the jury?—We often have practical miners on in Yorkshire, or men who have been practical miners.

33825. (*Mr. Ratcliffe Ellis.*) Men who have been at work in the pit?—Yes, very often men who have retired come on the jury and make very good jurymen as a rule. It depends where the inquest is held. It is sometimes held where the police can only get shopkeepers. We usually have one or two miners, at all events, on our juries, and often more.

33826. (*Chairman.*) You are satisfied with the composition of the jury?—As a rule I am satisfied with the composition of the jury.

33827. (*Mr. Wm. Abraham.*) You know of some cases that have not been satisfactory?—Yes, where the coroner does not allow what I consider proper latitude. From his point of view he allows plenty; I suppose he thinks so.

33828. Where all the facts from your point of view were not ascertained?—They do not become public. We ascertain them of course ourselves, but they do not become public and it leads to rumours and misunderstandings even where there is no serious matter.

33829. Would you lay down as a rule that where one shift is worked three examinations should be made, two hours between each?—In my scheme they examine for that one shift within two hours at the beginning and two other examinations would be made during the shift.

33830. At different intervals?—Yes.

33831. The new point you have given us to-day, which I think is very valuable, is that these examinations should be made within two hours of each other?—Within two hours of the men beginning work, that is the first thing, and my next point was that the man should be able to get round his district in two hours.

33832. That would be the second?—Yes, the second examination.

33833. Then another examination?—Yes, another examination still. I would not put the interval between those two second examinations; I would not lay it down definitely. A man goes through his district, begins again, and would make his examination of some places within less than the time, but I want every man to be seen twice when at work by the deputy, in addition to the manager or under-manager coming round.

33834. That, according to your opinion, could be easily done in a shift of eight hours?—It is done in some very large collieries.

33835. It is done?—Yes, in Yorkshire in very large collieries, although the rule does not require it.

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33836. Where it is not done how many hours are there where the men are working before the end of their shift without that kind of examination taking place ?—He may be there seven hours.

33837. That you object to ?—Yes.

33838. That you think dangerous ?—I think it is dangerous.

33839. Highly dangerous ?—Yes.

33840. Where two shifts are being worked you want an examination to be made the last two hours of the first shift to do for the morning examination of the first shift ?—Yes, I think that would be satisfactory.

33841. And then to follow on ?—Then you come on with two examinations again.

33842. So that in two shifts of eight hours you would have six examinations ?—Yes, two intermediates. One examination of course would fill two purposes.

33843. (*Chairman.*) There would not be six examinations, but there would be five.—Yes, but one examination would fill two purposes.

33844. Would that not give you too large a number of hours in the closing of the second shift ?—No, it would be the same as the first shift. Suppose the first shift began at 6 o'clock and the man examined from 4 to 6, and then the shift—say it was an eight-hour shift—finished at 2, between 6 and 2 there would have been two inspections by the deputy, but from 12 to 2 one of these inspectors would have been doing duty for the examination before the other men came in. There would be five examinations.

33845. Five examinations would carry out your view ?—Five examinations would carry it out.

33846. You would have it laid down as a rule of some kind that the fireman's district would be of such a size that this could be done ?—Yes, I think if you made a rule that the districts must be examined within two hours of the men beginning work and that there must be two examinations during the shift, you would get it, or as near as may be.

33847. With regard to timbering, I think Mr. Cunynghame put a question to you. What is your opinion with regard to systematic timbering. Is it necessary for safe working of our mines or not ?—I think systematic timbering is necessary and desirable and I always have thought so. It has been carried out for 50 years in some mines.

33848. You would be favourable to have rules directing how timber is to be put and the distance it should be put on the roads to the working places and roads of the same character, and not the same length ?—I think that the roads ought to be systematically and properly timbered.

33849. All roads ?—Yes. Where the road is in rock and will stand it would be foolish to put timber up.

33850. You would put timber on all roads where it is necessary ?—Yes, and I think it ought to be systematically and properly set, but do not take it from me as a practical man that I advocate timber in every place.

33851. I agree with you; I do not want it in every place. In weak cases it would be advisable ?—Yes, it would be most desirable.

33852. (*Mr. F. L. Davis.*) You say you would like to see this state of things, that one manager shall not have charge of more than one mine, with exceptions ?—Yes, with exceptions.

33853. I did not understand how you meant to put that into force. Do you suggest that should be stated in the Coal Mines Regulation Act ?—I think there should be some power given to the inspector to object to a man having that sort of management.

33854. You would leave things as they are at present ?—Yes, it is satisfactory in most cases, but I would give the inspector power to intervene where it is not satisfactory.

33855. Where he found it was not satisfactory to be able to stop it ?—Yes.

33856. Do you consider that you have not got that power now ?—No, I do not think we have got it now.

33857. What about rule 42 ?—I do not think that would come under Section 42.

33858. Not sufficiently definitely ?—Yes. I do not think you would get a case under that.

33859. You would like to have the power to do that, but generally speaking where there are a number of mines under one manager he is generally capable of taking charge of them ?—Generally speaking, he appoints an efficient man to carry out the proper management of them.

33860. With regard to the Special Rules and the new Conciliation Board, you suggest—I am not quite clear about this—everybody who wants a Special Rule established would have to propose it to that Board ?—He would have to communicate with the inspector of the district, who would then take steps to bring it before the Board.

33861. If the Home Office want to propose any rule they would have to propose it to that Board ?—I think they ought to be discussed by that Board.

33862. And the owners and the men all alike ?—Owners and men and everyone who knows about it.

33863. With regard to the examination question, you gave us the constitution of the Board of Examiners. It is to consist of a director of mining as chairman, three owners, three men, one manager and one engineer, I think you said ?—One representative of the Institution of Mining Engineers.

33864. Who are the others?—One member of the Colliery Managers' Association.

33865. And a professor ?—Yes, a Professor of Mining.

33866. Do you suggest that that Board should set the papers for the examinations ?—I think they first of all would have to consider that. That is a question that they would consider in making the regulations, but I think in practice the best thing would be for them to appoint examiners who would submit the papers they proposed to set to the Board for approval. In appointing local examiners for each centre one of the principal duties of that Board would be to see that the standard was equal throughout the Kingdom.

33867. These examinations would be held in different districts ?—Yes.

33868. You do not propose in that case that all the papers should be the same ?—Practically the same.

33869. The local examiners who set the papers might ask the approval of the other Board of the questions ?—That is so.

33870. Your reason for that is you wish to take into consideration the differences that may obtain in different districts ?—For the purposes of examination the differences are very slight. A man ought to have a thorough knowledge of mining. The certificate applies to the whole of the Kingdom, and I think he ought to be qualified to take the management of any mine in the Kingdom.

33871. You suggest that the differences are so slight that uniformity would be attained ?—I think so. I think it could be attained. I would appoint the examinations in local districts really for the convenience of the candidates, or you might have a central examination so far as that goes.

33872. Who would mark the papers, the local men ?—I think the examiners would mark the papers and report to the Board of Examination, who would grant the certificates.

33873. What is your view on the question of marks generally. Would you have a proportion or a maximum ?—I would have a proportion. We formed the Board in India during the time I was there and I went out to organise the thing, and we had proportionate marks.

33874. In every subject ?—In every subject. That is the schedule of marks on the right-hand page (*producing book*). There are regulations there drawn up.

33875. These are the necessary marks to pass ?—Yes, those are in the regulations which we drew up for the Board of Examination.

33876. Is your view that you would carry out that in this country ?—I would carry out that principle in this country.

33877. In every subject the candidates ought to pass, and not necessarily pass on the whole amount of marks, but they must pass in each subject ?—The candidate must pass in each subject—in essential subjects. The two excepted are handwriting and arithmetic. In mining and engineering they ought to pass or they ought not to pass at all.

33878. If you had different sets of examiners marking in the different districts do you not think that they might mark rather differently ?—It would be for the Board of Examination to consider that. There would be only seven districts where they were examined, and I think that the Board of Examination would be strong enough

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to ensure that there was uniformity in that respect. You cannot allow for every human variation, I agree.

33879. Your opinion at any rate is that you would not have one paper set by this Board of Examination to operate in every district, but you think that the differences are so slight, I mean the different kinds of questions, that uniformity would be attained?—I think it could be attained, and I think it would be the duty of the Board of Examination to see that it was attained.

33880. (*Mr. Ratcliffe Ellis.*) Would it be possible to have one examiner on each Board nominated by the Central Board?—Yes, it would be. The examiners ought all to be appointed by the controlling Board.

33881. Each Board should have one examiner?—On the controlling Board.

33882. Yes, that would be possible?—That would be possible.

33883. (*Mr. F. L. Davis.*) The same man going round each district?—Yes, that would be a good thing.

33884. Two in the district and one central?—One outsider.

33885-8. That would do something to secure uniformity?—Yes.

33889. (*Mr. Smillie.*) Do you think that the district inspectors have sufficient power at the present time to enforce what they believe are conditions of safety for underground workmen?—I think in a great many cases they have, but not as regards the management always. I think their powers generally are sufficient.

33890. They have not power at the present time to enforce the introduction of safety lamps if the management refuses to put them in?—Yes, they can go to arbitration.

33891. They have no power without going to arbitration?—If it is a place where they have gas I should prosecute if they would not put safety lamps in.

33892. Would you succeed?—I think so. I might not. It all depends how it went. I think where there is a serious amount of gas that safety lamps ought to be used. I have no sympathy with naked lights.

33893. Supposing you were working under the sea and the inspector, from the nature and appearance of the roof and sides, was of opinion that it was dangerous, would he have power to stop a mine?—He could give notice under the section.

33894. You require to go to arbitration?—Yes.

33895. A prosecution would be of no service in a case of that kind?—He could not prosecute in that case because it is not provided for in the Act. He could give notice and go to arbitration.

33896. Do you think that it would be advantageous to give the chief inspectors more power than they possess at the present time?—No, I think their general powers are quite enough.

33897. You think they are strong enough?—Yes. It depends a great deal how they are exercised.

33898. You propose reducing the number of districts from 12 to 7?—Yes.

33899. Is it the case that a very large part of the time of the inspectors is taken up with travelling?—That is so, and that is why I want to reduce the number of the districts.

33900. Would not you increase the travelling if you reduced the districts?—No, I would station in the scheme I suggest the assistant inspectors and the deputy chief inspectors at suitable places in the districts to avoid the unprofitable time spent in travelling.

33901. You would so arrange your chiefs, sub-chiefs and assistants as to give them the least possible travelling?—Yes, and if possible have them in telephonic communication with each other so that you could get at a man at a minute's notice and cut out your work much better. There is often a difficulty when you have sent a man to a certain part of a district and another man probably has to cross him, because you have not been able to cut out your work better. Of course you can telegraph, but I think that telephones are more convenient.

33902. In answer to Mr. Abraham, you said in the event of an explosion taking place during the time that an inspector was waiting for the result of an arbitration where he had advised that lamps should be put in, the manager would find himself in a serious position?—Yes, I think he would.

33903. In what way?—What the inspector prophesied would have happened, and he would be liable to prosecution in any case for not using lamps where there was danger from gas. In a case where an explosion happens through the use of naked lights the manager is liable to prosecution because he has not used safety lamps, *prima facie*.

33904. Supposing an explosion happened because of insufficient ventilation, and it could be proved and was proved at the inquest that the attention of the manager had been called repeatedly by the inspector to the condition of matters, do you think the manager in a case of that kind would find himself in a very serious position?—Yes.

33905. Do you think a prosecution would follow?—Yes.

33906. Have you read the Report of the inqury into the McLaren explosion?—Yes; but I have not the facts quite in my mind at the present moment.

33907. Do you remember that the assistant inspector of mines had on two occasions visited that mine and found a cap on the safety lamp for 500 yards in a return airway?—I believe that was so.

33908. Are you aware that the inspector wrote on two occasions to the general manager calling attention to the dangerous state of the mine?—I remember that was so.

33909. Do you remember that the assistant inspector found a cap on the lamp in several of the working places?—I believe that was so, too.

33910. Taking it for granted that an inspector of mines had called the attention of the manager to the state of the ventilation, and pointed out that it was dangerous, and an explosion of gas took place, would you expect the manager would find himself in a serious position?—I certainly think he would.

33911. Would you expect a prosecution to follow in a case of that kind?—Yes, I would as a rule, but it depends upon circumstances. I should judge each individual case on its own merits.

33912. You certainly had it in your mind, when you answered Mr. Abraham, that in a case of that kind you would expect a prosecution to follow?—Yes, it would be a very likely case. There might be circumstances connected with it that prevented it being desirable to prosecute.

33913. Would you be in favour of a manager or an inspector of mines being appointed to his position who did not hold a certificate of competency?—I do not quite gather what you mean.

33914. Are you in favour of managers or mines inspectors being appointed who do not hold certificates of competency?—No. I think they ought to have certificates.

33915. There is no necessity at present, in the Coal Mines Regulation Act, for a mines inspector to hold a certificate?—No, but as a matter of fact they all do.

33916. Why should they hold certificates?—Because we want to have men who are equally qualified. If it is necessary for a manager of a mine to be a certificated man I say it is necessary for an inspector, who is presumably over him.

33917. Is it really necessary—it is according to law—that a manager of a mine should hold a certificate of competency?—I think it has had a very good effect in practice.

33918. Supposing he was quite competent to hold a certificate, would you say it was unnecessary?—It makes no difference to a man's qualifications, except it finds out his qualification in examining him for it.

33919. The Home Secretary at the present time has power under the Mines Act to appoint fit persons, which may be taken to mean competent for the position of inspectors of mines?—Yes.

33920. You think that should be strengthened by saying that they must hold certificates?—I do.

33921. And have passed a certain examination in addition to that?—I do.

33922. Why hold a certificate?—Because the only object of examination is to weed out the weaklings.

33923. Why hold a certificate? Is it because it is a proof of competency?—That is a proof that he has certain qualifications, at all events.

33924. If it is necessary, and you think it is highly necessary, that colliery managers and inspectors should hold a certificate proving their competency so far as examination can prove it——?—Yes, I do.

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33925. Would you say the same thing should apply to a colliery fireman?—No, I would not go to a lower grade than that.

33926. Is the colliery fireman, so far as safety is concerned, not the most important man in the mine?—No; the manager is the most important man.

33927. The man who examines the places in the mines who is responsible for the safety of perhaps 50 or 60 men by his examination, is he not more important than the manager?—No; the manager is like the general; he is responsible for the strategy. The fireman is for the minor tactics.

33928. It is necessary, however, that the fireman should be a competent person?—Yes.

33929. What do you mean by a competent person in the case of a fireman?—A man who has good practical knowledge of mining, who can arrange for detail of ventilation, and who knows all about timbering and getting coal and so forth.

33930. He should have a knowledge of explosive gases?—Yes, and he ought to be able to examine for gases.

33931. Is there anything to prove that the persons who are appointed by managers have that knowledge to-day?—There is nothing to prove it, except that the manager is held responsible by law for the appointment—that the man is competent.

33932. Where is the manager held by law responsible? Have you ever known a case where a manager was held by law responsible for having appointed a person who was not competent?—Not directly. It would be a difficult thing to prove. There are cases where a man is prosecuted because a district is not in a fit condition.

33933. Is not the fireman responsible for his own acts?—Yes.

33934. (*Mr. Ratcliffe Ellis.*) And the manager, too?—Yes, and the manager is responsible for the fireman's acts.

(*Mr. Smillie*) A manager is responsible under the law to appoint a competent person.

33935. (*Mr. Ratcliffe Ellis.*) More than that, he is responsible for the acts of the fireman unless he can show that he has taken proper steps to carry out the regulations?—That is so.

33936. (*Mr. Smillie.*) The real point is, he has put it plainly, he does not think it necessary that firemen should hold a certificate of competency?—No, I do not.

33937. You have expressed the opinion that inspection by workmen under Rule 38 is good?—Yes.

33938. And has assisted probably in preventing accidents?—I think it has.

33939. You think really it should be more largely taken advantage of?—Yes, I should like to see that.

33940. You would not think that a monthly examination in some mines would be too often?—No.

33941. Does the examination by a workman under Rule 38 not lead to laxity in the management?—I do not think it does.

33942. If that does not lead to laxity in the management, why do you hazard the opinion that more inspection by Government officials would lead to laxity?—Because the inspection by inspectors is under Government authority, and ought to be more thorough. A man is appointed by the workmen and there is nothing to show what his qualifications are and whether he is able to give a general opinion. It may be very valuable for certain details, but not what I call inspection of anticipation of what may happen in the future in the particular district.

33943. Government inspection is more required in badly-managed collieries than in the best governed collieries?—Yes.

33944. There are many mines in which there is very little occasion for visits of the Government inspector?—Yes: you can rely on the management to bring anything to your notice that is happening at the colliery which is a serious matter.

33945. It is really to endeavour to keep the worst up to pretty near the position of the best?—I would like to see the worst raised to the best standard.

33946. Do you think it possible for the present staff of inspectors, or the number you propose, to thoroughly inspect the mines?—I think that a re-arrangement of districts and a relief from the clerical work would keep up a pretty good standard.

33947. You define what a sample inspection of a mine is. Would you define thorough examination by a mines inspector in a mine?—That would be examining all the faces and all the airways, and all the machinery, and everything connected with the mine.

33948. It would be to arrange that the examination which is provided for now must be made daily by the firemen and the other officials about the colliery?—Which is distributed amongst a large body of officials.

33949. Do you think four times the present staff of inspectors could make a thorough examination of the mines in this country once a year?—No, they could not do it.

33950. As a matter of fact there is not one mine in 20 at the present time which is thoroughly examined by a mines inspector each year?—No, not thoroughly examined.

33951. I suppose we may take it you would not think that a fair sample of the examination of a mine was that a mines inspector should go down to the pit bottom and measure the air and ask the manager, "Is all the rest of the mine in the same condition as this?" That would not be a fair method of sampling?—It would depend upon the extent of the mine. In a large mine it would not be.

33952. Take a mine employing 300 men, and extending two miles: you do not think it would be a fair method of sampling a mine of that kind?—You could not sample from the bottom.

33953. Supposing you were told that a mines inspector had sampled from the bottom?—He might be there for a special purpose or duty. I myself have gone to several collieries in a day to measure the air for a special purpose.

33954. If you were told that it went into his report as one of his examinations of the mine for the year, and that the Government had had that report, do you think that is a fair method of sampling?—It would depend so much on the circumstances. I do not think that I ought to answer that question.

33955. Would that be your method of sampling a mine?—It would depend what I was going for. If I was going to see how much air was going into that mine, I would have sampled the volume of ventilation, but if I were going to see what the workings were like, it would not be.

33956. Do you think that the workmen should be as deeply interested in Special Rules for their safety as the management?—I would like to see them interested in it.

33957. Do you think, in view of the fact that they have to risk their lives every day, that it should be of much interest to them?—Yes, I think so.

33958. Would you be prepared to give them the same rights? I think that you suggest that they should be there, or rather that they should have the same rights to a voice in the making of Special Rules?—To object when making them.

33959. It is really a question of objecting. I think that Mr. Ellis rather endeavoured to change your own view upon that matter. You sketched out a plan by which new rules for safety should be mutually agreed to?—Yes, if possible. I sketched out a scheme which I thought might be done. I am not particularly enamoured of that scheme if you can get a better one, but I would rather see the people agree on a rule. That is my view.

33960. Your opinion is that if the workmen were jointly consulted in the framing and drawing up and adopting of the Special Rules for safety they would be more likely to carry them out?—Yes, I daresay they would. At all events there would not be so much friction. There would be no friction in the first putting into force of the rules.

33961. Mr. Ellis suggested you would not take away the right of the employer to suggest a rule and send it on to the Home Office?—No.

33962. Would you give the workmen the same right?—Yes. I do not see any objection to them proposing a rule.

33963. If the employers have that right you would give the workmen the same right?—No. If it is a good rule it should go on.

(*Mr. Ratcliffe Ellis.*) We have no objection to the workmen proposing rules.

33964. (*Mr. Smillie.*) Mr. Ellis put it an employer might suggest a rule and send it to the Home Office, but that before it was established any person interested might have the right to object?—Yes.

33965. And instead of going to arbitration you would be willing that it should go before a judge of the High Court?—Yes.

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33966. Could you conceive it possible for a working miner to go to the High Court in a case of that kind if he objected to the rule?—He would have to be represented: my view is that before anything of that sort takes place it ought to be considered by this Mining Board consisting of three men representing the coal-owners, three the miners, and a chief inspector.

33967. Mr. Ellis put it that you would not object, aside from that altogether, to an owner suggesting a rule and sending it to the Home Office, but that before it was established you should give every person who had a right the right to object?—Before it was established or went to arbitration I would like to see it considered by the Board I suggested.

33968. We will take it your own course you think is the best?—I think so at the present moment, but I have not an inner knowledge of how the factory system is working from the point of view of the men and the owners.

33969. (*Mr. Ratcliffe Ellis.*) Under the Factory Act the rule must emanate from the Home Office?—Yes.

33970. Under the Coal Mines Act there is an obligation put upon the owner that he must establish these rules?—Yes, that is the difference. As long as you get good rules easily established and not too many of them, that is the great thing.

33971. (*Mr. Smillie.*) Has it been your experience that there have been more fatal and serious accidents from falls where the roof was considered good, than where the roof was considered really a bad one?—That is often the case.

33972. I suppose that would arise out of trusting too much?—Yes. That is the value of systematic timbering.

33973. You pointed out in answer to Mr. Abraham where you have a rock roof?—That is in a roadway.

33974. Very often where there is a rock roof on one seam and the seam underneath that has been worked out, that tends to injure that rock roof?—Yes; I would not exempt every rock roof, but there are places in the pit which every practical miner knows do not require timbering. They stand for ever. I do not think any practical man would advocate timbering them. In fact the miners would be apt to smile if they saw it. You ought to put timbering in any road that is unsafe, either from working a seam underneath it, or any other reason. It ought to be timbered. The Act requires it at present.

33975. Have you had any experience in Yorkshire or anywhere of the coal-cutting machinery?—Yes, we have a lot of coal-cutting machinery in Yorkshire.

33976. Electrical and compressed air?—Yes.

33977. We may take it, I suppose, that the chief way by which a miner looks after his safety from falls at the face is by sound?—Yes.

33978. Either by sounding the roof or being warned through certain noises which he hears?—Yes.

33979. Where there is coal-cutting machinery and conveying machinery, which is largely being used now, it is impossible for a miner to hear?—That is so.

33980. The roof working, as we call it?—No.

33981. In a case of that kind it would be more than ever necessary that there should be systematic timbering to protect the workmen?—Yes, and it is much easier in a coal-cutting face than an ordinary face—systematic timbering—because you have your straight line or run. I am speaking of a longwall face. It ought to go in a straight line. Some places in Yorkshire have every prop absolutely straight all the way down the face.

33982. Do you believe in the miners setting their own timber?—Yes, I do, in a great many cases.

33983. Does it not become more difficult when machines are working to know who is the best person to set the timber?—I think it is a matter for the decision of the manager who is going to set the timber. It has to be stated, and it depends on the arrangement with the manager who is to set it. In the north of England the deputies set the timber for the men. In Yorkshire the men set their own, and in most other districts, That entirely depends upon the contract of the men.

33984. With regard to Rule 38, the miners are very anxious that "who are working miners" should be taken out and the words "who are or have been practical working miners" should be put in, and that persons who have been practical working miners should be allowed to make this examination. Mr. Ellis put it would you be in favour of a person who had been a practical working miner many years ago being entitled to make that examination, and you said no?—I prefer the man who is in active service at the time.

33985. A practical working miner at the time of the appointment?—Yes.

33986. Can you give any good reason for that?—Yes; where a man has been out of the pit for some time, his knowledge is apt to get a little rusty, for one thing, and he is not qualified, or is not so likely to be so qualified as a man absolutely working at that time, for inspection purposes. He may be better for other purposes.

33987. Supposing a limit of 10 years was put in, would you be willing to have them then?—I think it is better to leave it as it is. It seems to work well. I have no fault to find with the way it has worked.

33988. A person working in a particular colliery which is to be examined, is best suited to make the examination, because he is working there?—He knows the pit, to begin with. He does not go to the pit without knowing what to look for and where to look. He has a better chance.

33989. Does he not only know the part of the pit in which he is employed?—Yes, but he has a general knowledge of the geography of the pit, and he will make a good inspection in much less time than a stranger would.

33990. As far as Yorkshire is concerned there is no difficulty through fear of victimization?—No, I do not think there is.

33991. You prefer seeing greater advantage taken of that particular rule?—I do. I think it is a valuable thing.

33992. (*Dr. Haldane.*) Do you think it is desirable to have any more definite standards of ventilation than exist at present? Suppose there is black-damp in the air and nobody knows exactly how much is to be tolerated?—I think for all practical purposes it is sufficient to say that the ventilation should be adequate. I would rather not put any definition beyond that ventilation should be adequate, because you would have a great difficulty. Supposing you had a percentage of black-damp in the air, you would have to say where: is it in the current or in a crevice, where you often get it. I think you would have a great difficulty in defining. In the same way with firedamp.

33993. What is your standard of adequacy going to be?—I think that must be left to the judgment of a man.

33994. Supposing a case of that sort were to come into court?—Then there will be evidence. We have constantly cases of that sort of inadequate ventilation. You bring evidence into court, and the court decides whether it is adequate or not for that particular instance. All of us have thought it is possible, but I cannot say how you would frame a rule.

33995. Roughly you can frame a rule so as to exclude such cases as crevices, fenced-up workings, or out-of-the-way places in the mine?—You would have to say whether it was in the air. You might get a bit coming in an airway put to clear off gas, and there was gas in that. I do not know you can call that inadequate ventilation. If the main current was not sufficient to enable them to dilute it I should say it was not adequate.

33996. That is the case I am thinking of. For instance, if the last working place contained a very noticeable percentage of gas, and the return airway from it?—I should say that was not adequately ventilated from my point of view.

33997. Have you any standard in your own mind of what is adequate ventilation? When you see a cap on the flame, for instance?—If I saw a cap on a flame in a ventilating current, and that was passing over men, I should certainly say there was not enough air going to dilute that gas.

33998. Is it not rather a frequent occurrence to find a visible cap, I do not say a very large cap, but a very visible cap in the last working place in a split of air?—It ought not to be. It is not with us. The men are withdrawn as a rule if there is any gas in the current.

33999. You would in that case withdraw the men if you found it so?—I should withdraw the men if I were the manager.

34000. If you found it so on inspection you would ask that the men should be withdrawn?—Yes, and I would go again to find out what they were doing to better ventilate this place. I should write to the manager about it. So much depends upon each individual case. I have not been able to frame in my mind a rule which you can lay down in an Act of Parliament to cover those things in a pit of that kind as regards ventilation.

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34001. The difficulty is it is so vague just now, and one would like to get something more satisfactory. You are aware that a cap on the lamp, for instance, is a very indefinite thing?—A very indefinite thing. Some lamps show it easier than others.

34002. Some persons will see it?—Some persons will see it where another does not. Some persons will see it where it does not exist.

34003. (*Mr. Smillie.*) Some persons fail to see it where it does exist?—Yes.

34004. (*Dr. Haldane.*) That is one difficulty?—It is a great difficulty, I admit. You want a more exact definition, but I do not see how you can give it.

34005. You are aware that they have a definite standard in some places, for instance, in Westphalia, in the mining districts?—I have heard so, but, unfortunately, I have had no experience of what they do.

34006. There it is obligatory on the management to have the air analysed at stated intervals, the air in the main return?—Yes, but that does not show what is going in the workings at all from the practical point of view. You might have air in the return absolutely pure and the whole of the workings foul with gas. I have known cases. Supposing you have not the stoppings and separation doors in proper working order, you have a big current of air going down one pit and up another and ventilating very little.

34007. We have had instances of that?—I would not attach much importance to a sample of air taken in the return.

34008. These are not merely in the main returns, but in the branch returns. They have to be taken according to the German regulations?—Even then I would not, because there might be accumulations of gas not swept out by the air current.

34009. Supposing you found there was habitually 3 per cent. of firedamp in a main return or a branch return, you would know the ventilation of that district could not be adequate?—I should expect to find a lot of gas about the place when I went into it.

34010. The regulation would be of some use?—It would be of service in that way.

34011. Supposing the standard were a reasonable one, I mean?—Yes.

34012. There is no standard?—There is no standard at all now except what public opinion demands in the various districts, and that varies.

34013. You are aware it does vary. It is one of the things that has struck me most?—It varies in different districts. In some places public opinion seems more advanced than others.

34014. Very much, I should say. Do you not think some attempt ought to be made to standardise public opinion?—I think the only way is by raising the standard of education all round. That is what we are trying to do now. What I rather advocate is a point in view of making the managers' certificates due evidence of practical and theoretical mining.

34015. Do you think there would be any use in, for instance, fixing a standard of say 2 per cent. of firedamp in the air, and saying anything more than that constitutes a distinct cap, or that any larger proportion than that would be held as an air giving a distinct cap on the flame? —You mean by analysis supposing you found you had 2 per cent.

34016. Yes?—Yes, I think you might take it.

34017. Two per cent. will give a cap which the blindest man on earth could see I should say?—I would not go quite that far.

34018. I mean the most mentally blind person ought to be able to see it?—He ought to be able to see a cap with 2 per cent. on a good safety lamp. He ought to see that; that would define what might constitute a cap.

34019. Do you think it would be some use to have some sort of standard?—Yes, if you can make one suitable. I am rather against hard and fast rules which cannot be made a practical success. I think they do more harm than good. It becomes still more indefinite, and it gives loopholes for escape, too.

34020. Any rule to be good would appy to the working places?—Yes. There are lots of cases where you cannot avoid getting a cap. The gas is coming out of the coal; you cannot stop it; you can only dilute it; by putting your lamp right against the coal you will get gas right enough.

34021. At the roof?—Or even jetting out of the coal into your lamp, coming out under pressure.

34022. I should think it was possible to frame rules to avoid these cases?—Of course it might. I have no objection to a rule, if it can be framed, to cover these things. I have no objection to the principle, but I am not prepared to say that I can define a rule or frame a rule to cover such things.

34023. Have you formed any opinion as to the desirability of providing arrangements for washing and cleaning men at the pit-head at the end of a shift?—I think it would be a great comfort to the men in many cases if that were done.

34024. Have you had any cases where you have seen the system carried out?—They have had it to a limited extent in one of the Yorkshire collieries, and I believe it is appreciated. I have not seen the men using them, but I believe they are appreciated.

34025. The result would be to prevent a good deal of dirt and discomfort at home, would it not?—Yes. I doubt whether the men in many cases really desire it. They would rather go home and wash.

34026. Provided they have accommodation at home? —It is very awkward. A man cannot get a comfortable wash at home very often.

34027. It is for these cases you think it is desirable?— I think it is desirable if it can be done.

34028. Are you aware whether there are any one-room miner's houses in England? We have heard that they exist in Scotland in some districts?—No, I do not think I know of any cases of that sort.

34029. You think that is extremely unlikely?—Yes. I think it is very wrong that men should live under such conditions.

34030. There are apparently some old miner's houses in Scotland?—Are they provided as part of their wages? Are they provided by the owners or does the man select his house?

(*Dr. Haldane.*) I do not know.

34031. (*Mr. Smillie.*) They pay rent for them, but they belong to the colliery?—A man could get another house if he liked, or would there be none available?

(*Mr. Smillie.*) None available only miles and miles away.

34032. (*Dr. Haldane.*) In any case of that sort the absence of washing accommodation would be a serious matter?—They are building a model village in connection with one of the new collieries in Yorkshire, which I hope to describe some day. In that they are making provision for bathrooms.

34033. In each house?—Yes. The scheme is only sketched out at present.

34034. As yet, at any rate, it is exceptional rather than otherwise, to find bathrooms in a collier's house?—Quite exceptional.

34035. In many houses the men can get some room where they could go to?—Of course it is very crowded and insufficient for a man to have a thorough wash after the pit shift.

34036. You think on the whole it would be a great boon? —I think it would be a boon to the men.

34037. To have accommodation of this kind?—Yes.

34038. Have you formed any opinion as to the desirability of providing sanitary conveniences underground? —I think they might be provided in many cases. If the men could go safely into the goaf and bury the stuff up, it is the best thing.

34039. There are a good many men working in the mine who are a long way from the goaf?—Yes. I think there ought to be places provided where they can go. It is no use providing places like that unless they are properly attended to and cleaned.

34040. Are any arrangements of that sort made in the Indian mines?—In the Indian mines sweepers go round the mine—people go anywhere they like, and these men sweep it up. There is a particular caste in India, a sweeper caste.

34041. They work in the mines, too?—They work in the mines, too. It is only the low caste men who do it. The miner will not do that work. That is the case in all the towns, and so forth. The sweepers do that.

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Mr. W. H. Pickering.

12 Dec., 1907

34042. Do you know whether they have any trouble with ankylostomiasis in collieries in India?—I have heard of a case which I think probably is so, but not in the Bengal coal mines to any serious extent as yet.

34043. There is very much on the surface?—In the gold mines it is the case.

34044. Constantly Europeans get affected in gold mines?—I think in some of the thin seams in the Punjaub they do. Before I came away I was beginning an inquiry about that.

34045. (*Mr. Ratcliffe Ellis.*) With reference to General Rule 1 there are other gases which have to be diluted besides inflammable gases?—Yes.

34046. The suggested standard for fire-damp would only apply to one sort of gas?—Yes, that is the case.

34047. The rule as it is now requires all kinds of gases, whether inflammable or not, to be diluted?—Yes.

34048. And the ventilation must be adequate?—Yes.

34049. You have no fault to find with General Rule 1?—No: it has worked very well in practice. It has been embodied in rules all over the Empire.

34050. You think the General Rule which provides for the men being withdrawn under certain conditions might be improved?—It is possible that might be strengthened.

34051. Do you think it desirable instead of leaving it to the discretion of the manager when the men should come out, that there should be a state of things prescribed when they must come out?—If it can be prescribed I see no objection to that at all.

34052. It has been suggested that the visits of the inspectors to the mines are anticipated, and that preparations are made for their coming. Is it the custom of inspectors to give notice when they attend mines?—Not always.

34053. You make surprise visits?—Yes, at times.

34054. Take an accident, for instance, where the state of things must be left until you come, unless it is necessary to do something for safety. You would not be very easily deceived as to whether the state of things was left as it was or not?—No. You get witnesses of the accident.

34055. They know whether any alteration has been made?—Yes.

34056. Immediately after an accident it is not necessary for some member of the Federation to be put on guard to see that nothing is moved?—I do not see any necessity to guard it.

34057. (*Mr. Cunynghame.*) You spoke of some form of Board in each district to consider rules, which was to have members of the coal owners and also miners represented upon it in some way?—Yes.

34058. You do not suggest that the opinion of that Board should be final and binding upon the Secretary of State?—No.

34059. The chief object is to secure that before Special Rules, which may be Special Rules for all places and not merely a district, are brought into operation, that there should be a full opportunity of everyone consulting upon the matter and forming the most deliberate opinion they can, and reporting it to the Secretary of State?—Yes, that is my view.

Mr. EVAN THOMAS, called and examined.

Mr. Evan Thomas.

34060. (*Chairman.*) You appear, I understand, on behalf of the Rhymney Valley District, and you have been deputed to give evidence before this Commission by them?—I have been deputed by the South Wales Miners' Federation, but Rhymney Valley is the district I immediately represent.

34061. You appear on behalf of the South Wales Miners' Federation?—Yes.

34062. What steps have you taken to ascertain their views on the various questions you wish to put before us?—I have met the men at their committee meetings and also at general meetings, and my own observations.

34063. You have had a conversation recently with your Federation, and you believe what you are going to tell us may be taken to be not only your opinion but the opinion, at all events, of the great majority of the men in the Federation?—Yes.

34064. With regard to inspection of mines, you say that the present number of Government inspectors is inadequate and that it is impossible for them to make many inspections of the same collieries, and also that the areas are too extensive. How far deficient do you think it is. How many more inspectors would you like to see in the South Wales District?—I think that they could be practically doubled.

34065. You think if you double the number of inspectors that would be sufficient?—It would meet the situation certainly to a better extent than at present. I could not say definitely whether it would be sufficient or not.

34066. How often do you think mines ought to be inspected in the course of a year?—If two or three thorough inspections are made during the year I think that would be fairly adequate.

34067-8. For each mine?—Yes.

34069. You consider if you double the number of inspectors you could inspect every mine in the district two or three times a year?—Yes.

34070. Would you do anything by way of relieving the inspectors of some of the duties they have now so that they might have more time for inspection. They perhaps have more clerical work to do than they should. Perhaps you do not know much about that?—I do not know much about the work they have to do in their own offices.

34071. In a general way you think that about double the number of inspectors would be sufficient?—Yes.

34072. Then you want to have workmen inspectors. You want a third class of inspector who would, generally speaking, remain third class inspectors. They would not become assistant inspectors or chief inspectors as a rule, but they might?—Yes.

34073. How much do you think they ought to be paid for that sort of inspection. What could you get good men for to do that work?—£3 10s. or £4 a week and their travelling expenses.

34074. They should be under the control of the chief inspector and should have smaller districts allotted to them. Each one to take a particular district?—Yes.

34075. Under a chief inspector and be responsible for that district only?—Yes.

34076. The inspector would have power to send them to other parts of his inspectorate if he so desired?—Certainly, they would be under his control.

34077. With reference to inspection by workmen under Rule 38 you say this is almost a failure, some of the causes of this failure would be the fact that the workmen are apprehensive of unpleasant consequences following upon making a report that would be considered by the management as being an unfavourable report. What experience have you had of that. Have you known cases where a man has suffered from having made what the manager considered an unfavourable report, but which the man considered was a true report?—I am in the habit of attending the Colliery Committees when the examiners are appointed, and also when examiners make their reports, and I attend the committees in the course of a month or two or three afterwards and I generally hear complaints from the men. Perhaps there is nothing direct and distinct, but the men are under the impression that so and so has suffered. It may not be directly as the result of the report, but that is the impression upon the men.

34078. Do you think that impression causes them in many cases to give reports that are unduly favourable to the management?—No, I believe the men give the reports as they find the conditions in the colliery.

34079. Notwithstanding they are afraid that they may suffer from it?—I believe they give true reports.

34080. You go on to say also the cost such examinations involve is against the rule being carried into effect. How do you think the cost ought to be borne?—The colliery committees have to pay the examiners out of their own funds and to examine some of the large collieries it means the appointment of sometimes six or eight men, and it

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will take them perhaps two or three days to do the whole of the colliery, and for six or eight men to be paid full wages comes rather heavy upon the funds of the committee.

34081. Do you think that the funds of the committee ought to be helped out in any way. Do you think that the owners ought to subscribe or that the Government ought to pay?—Some of the cost, pay half the expense. My opinion is that it is not very satisfactory, because if some of the men were paid by the companies and others were by the workmen, there would be some kind of distinction between them.

34082. A man is disposed to be perhaps rather biased or less independent?—Yes.

34083. If he accepts money from the owner he is not quite so independent?—Yes.

34084. There is a difficulty in getting the best and most experienced workmen to undertake these examinations owing to the inconvenience it causes them because, as a rule, such men have boys working with them. That is because the boys have nobody to work with in that case and their work has to be distributed differently?—Yes.

34085. You add as a reason why this inspection is not more frequent that a large section of the workmen are indifferent.

(*Mr. Ratcliffe Ellis.*) "The usual indifference."

(*Chairman.*) "The usual indifference that prevails." You think the majority of the workmen are not very keen on this inspection?

(*Witness.*) No.

34086. You wish they were more keen?—Yes.

34087. You think it is a very useful thing?—I think so.

34088. With regard to the firemen's examination, you say that the districts are too large and the hours too many. Their working shift ought to be limited to eight hours out of the 24. Their work ought to be confined to and their attention concentrated upon examination of the workings and roadways. Do they, as a rule, work more than eight hours?—Yes, they work, as a rule, about 10 or 12.

34089. Longer than the hewers do?—Yes.

34090. Do you think in your district that a great deal of time is taken up by duties otherwise than those connected with the safety of miners?—No doubt there is a great deal of that.

34091. You say their duties now extend to time-keeping, superintending wage-men and the underground traffic, and are made responsible for the output of coal from their respective districts. Also they have, as a rule, to take part in the "measuring" of colliers' and repairers' work. Those duties, no doubt, take up a considerable portion of their time?—Yes.

34092. Then as to the standard and maintenance of discipline, you say fines arranged between man and manager should be discouraged. Breaches of the rules should be dealt with by the magistrates. Would you have any exception, or would you have every breach of rules, whether it concerns safety or not, dealt with by the magistrates?—Personally, I may express the opinion that there may be some minor offences that could be dealt with at home, but as a general principle I would say that offences that would mean endangering the lives of those in the colliery should be dealt with by the magistrates.

34093. How would it be if a list of fines was put up in a conspicuous place in the mine. Would that have a deterrent effect?—That is done at present.

34094. You do not think that is sufficiently a deterrent. You rather trust to prosecution even though the fines are put up and everybody knows who has been fined?—Yes, there is a fine and also an apology and the man's name placed to it. It is placed up in a conspicuous place at the top of the colliery. That is done at present.

34095. Notwithstanding that you still think in most cases or, perhaps in all cases of breaches of rules affecting the safety of miners' lives, that they should be had up before the magistrates?—I think so.

34096. With regard to the establishment of Special Rules, you say that the workmen, through their representatives, should have a voice in the framing of Special Rules—they are the people that have to live under them, carry them out and suffer their penalties. What do you mean by having a voice in the settlement of Special Rules?—Have a voice in the initiative stage of framing the rules. The present positon is that the owners and the management frame the rules and then they are published and put up in a conspicuous place. There is an opportunity given to the workmen to object or oppose any of them. I think the best thing would be for the workmen to have a share in the actual initiative stage.

34097. Also, perhaps, you think that the Union, or persons representing the miners, should be allowed to promulgate rules themselves for discussion?—Yes.

34098. Your complaint is that the workmen are not called in until the rules have got to such a stage that the, mine-owners are practically committed to them?—Yes.

34099-101. As to accidents from falls of roof and sides, do you think timbering ought to be more systematic on the roads? What do you understand by systematic timbering?—I believe the general idea is that timbering should be erected whether it is actually wanted at the time or not.

34102. You also add that the workmen ought to have more liberty and a great deal more discretion regarding the standing or erecting of timber than at present in their possession. What is the state of things in your mines as regards that?—There is a certain class of timber the workmen are allowed to put up only when and where ordered by the management.

34103. That is to say, they do not get paid for it unless they are ordered to put up this timber. It is not a breach of rule for a workman to put up timber, but he cannot claim payment unless he is told to put it up?—It would be a breach of instructions.

34104. His instructions are not to put them up, whether paid for them or not?—Yes.

34105. The management would not object to it if the man did not claim to be paid for his time in putting up timber. It is simply a question of money?—No, it is a question of discipline. It is a question of giving instructions. We have it in our price list. We have been forced to include that in the price list opposite the item, say cog or road posts to be paid at such a price, but it is stated when and where ordered by the management.

34106. Your theory is that the management would at all events have the right to prosecute a man for breach of duty, for putting up what a man considered necessary timber, even though he was content to put the timber up and not get paid for it?—I did not catch your question.

34107. I rather understood from other witnesses in South Wales that the management would not prosecute a man or consider it a breach of duty to put up timber, but they would say "Such and such timber is not required, and we will not pay you for it." That is the only way the man would suffer?—They would not prosecute for not putting up this timber, but they are prosecuting the men for not putting up other timbers for which there is no payment.

34108. Not putting up timbers: but I understood you to say a man could be prosecuted for putting up timber which you say is unnecessary?—They are prohibited from putting up a certain kind of timber, only when ordered.

34109. What objection would the management have to the man putting up any timber he pleased if he did not ask to be paid for it?—They say they are using timber unnecessarily, and timber is a very large item in the cost of production.

34110. The men themselves ought to be the judges of what timber is necessary, and ought to be entitled to be paid for putting up any timber they in their discretion consider necessary?—Yes.

34111. As to accidents on haulage, main roads and headings, you say that accidents of this description are very frequent. Having looked up the record of fatal cases in the district you immediately represent, namely, the Rhymney Valley, for the years 1903, 1904, 1905, and 1906, you found that of a total of 60, 24 took place on roads, headings and haulages, namely, 40 per cent. What do you mean: out of a total of 60 fatal accidents from all causes?—Yes.

34112. Explosions and everything?—No, I did not include explosions.

34113. What did you deal with in the total of 60?—60 fatal accidents from all causes during those years, except explosions.

34114. From every cause except explosions?—Yes.

34115. Haulage accidents and falls of roof and sides included?—Yes.

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Mr. Evan Thomas.

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34116. The remedy for this, you say, is that separate travelling roads ought to be provided. The suggestion you would venture to make in this connection would be to make the return airway the travelling road. A dual or double benefit would result, decrease of accidents, and an improved ventilation. Boys have to go out for light during the working shift very often, and it is most dangerous for them to travel over roads where ropes are in operation. In all cases you could not make the return airway into a travelling road in an old mine?—Yes, the principal return airway. I have seen it in one colliery, and I thought it was an excellent thing.

34117. (*Mr. W. Abraham.*) What colliery is that?—Llanhilleth, in Monmouthshire.

34118. What is the system there?—The main return airway is in a position that you can travel right through from very near the pit into the workings.

34119. Can you take a horse and tram through it?—Yes.

34120. (*Chairman.*) Would that be the case in other mines, that the main return airway would be capable of being made into a travelling road?—Yes.

34121. Then you say that when accidents do happen it is most important that the unfortunate victim should be taken out with all speed, and without any delay. Sometimes injured persons are kept a long time on the main roads where the incoming current is strong and cold, with the result that the injured man becomes a victim to a severe cold as well as an accident, and I have known one case where pneumonia set in and proved fatal. Do you know any cases of unnecessary delay in taking a man away under those circumstances?—We have had upon several occasions to take a complaint to the management.

34122. What have they said?—They say that they are doing everything possible to clear the road, but it is very difficult sometimes.

34123. In your opinion they might do more?—If they had these main return airways to travel along they could take them that way instead of waiting for the haulage, and so on, to be cleared.

34124. You do not suggest that the management are at fault, but that the system is at fault?—Yes.

34125. They do the best they can to get them out at once?—Yes.

34126. Then you say that headings ought to be wide enough for hauliers to be able to walk by the side of their horses and not in front of them, nor behind the tram. Accidents of this nature are pretty frequent. Hauliers, while walking in front of the horse, slipping and falling, and before recovering themselves the horse is upon them and the tram following crushing them to death. A foot-path by the side of the rails would obviate this danger. Supposing you had a foot-path by the side of the rails which was wide enough for a man to go on with safety would it be necessary to have any other provision for locomotion for the men?—Not so far as the hauliers are concerned.

34127. If there was a gangway by the side of this haulage could not the ordinary miner go up and down those haulage roads in safety if he was going to and from his work, or from one place in the mine to another?—If there is a gangway, but that would involve some separation between the gangway and the rails.

34128. Not only a gangway, but props and some separation, a partition or props, at short intervals?—Then the hauliers could not utilise that.

34129. With regard to the winding apparatus, you say these should be minutely examined immediately before the lowering and raising of the men. You do not think they are sufficiently examined now?—They are not examined immediately before the lowering or raising of the men. We had a case of this kind at New Tredegar on one of the Elliot pits a week or two ago. A bond of men were coming up and something went wrong with the ropes. There is a balance rope attached to the cage, and they were kept in the pit for about 40 minutes.

34130. (*Mr. W. Abraham.*) In the shaft?—In the shaft, and they had to be lowered to the bottom of the pit afterwards, and not taken up to the surface, and brought up through the other pit.

34131. (*Chairman.*) What was that due to?—Some derangement in connection with the ropes.

34132. Would an examination of the ropes have prevented that happening?—There would be a possibility of that being discovered before raising the men.

34133. What would have been discovered? I do not understand what was wrong. What caused the accident?—I could not tell you minutely and exactly what was the matter with the ropes, but there was something wrong with the ropes, and the men had to be kept in the pit for 40 minutes, or three-quarters of an hour.

34134. The present rule is that the mechanical engineer "shall every day carefully examine and report, or appoint a competent person to carefully examine and report, the state of the external part of the guides and conductors in the shafts, and the state of the head-gear, ropes, chains, and other similar appliances of the mine which are in actual use both above ground and below ground." You do not think that is sufficient?—It does not specify any particular time. It may be done the first thing in the morning, or during the dinner-time, or some other time.

34135. As regards safety lamps, any appearance of gas ought to be a sufficient reason for introducing safety lamps into a mine. What do you mean by "any appearance of gas"—just a pocket of gas?—Yes, any slight appearance.

34136. When they are introduced ought there to be any provision for taking safety lamps out again, or would you always have them used?—Once introduced I think they ought to stay there for ever.

34137. For ever?—As long as the colliery is worked.

34138. With regard to coroners' inquests, you say coroners should possess to some degree an acquaintance with collieries and underground work, and the daily dialect or terms used by the underground workers, so as to enable them to have a clear conception of the evidence given at their court. Do you say there are coroners in South Wales who are not acquainted with mining and mining terms, and who are consequently not able to do their duties properly?—They have no practical acquaintance with the collieries.

34139. They have sufficient acquaintance to conduct these inquiries?—They have to ask the inspectors now and again to explain to them what are the various terms, and so on.

34140. The inspector is always there to explain. Do you know any case in which you think justice has not been done owing to the coroner being ignorant of the practical working of mines?—No, I do not think I know of any case where justice was not done, but I know this, that some difficulty was experienced for the coroner in clearly understanding the situation now and again.

34141. Although there has been a difficulty, it has not resulted, you think, in any failure of justice at these inquiries?—No, I could not go to that extent.

34142. You say that workmen should have the right or power to call evidence and witnesses at these inquiries? The men, I understand, have a right to have a representative at these inquiries?—Yes, they have a right to have a representative, but he is entirely at the mercy of the coroner.

34143. Any workman is equally at the mercy of the coroner. It would not mend matters to say any workman may give evidence. You say any workmen should have the right or power to call evidence and witnesses. Now there is a man deputed by the workmen more or less to conduct their case for them. Your complaint is that the coroner does not pay attention to what he says?—No; I do not go to that extent, only I think that the workmen should have a right by law to call any evidence that they wish.

34144. Any workman?—No, the workmen as a body.

34145. That is to say, somebody representing the workmen?—Yes.

34146. The man who represents the workmen should have power to call any evidence he likes, or any evidence he considers material?—Yes.

34147. Naturally he must consider it material?—Yes.

34148. And any witnesses that he likes?—Yes.

34149. Then as regards Rule 45, as to a second inquiry you say that the Home Office should be somewhat more ready than you have found it to be to grant a special inquiry into the causes and circumstances of certain serious accidents, and especially explosions, if the majority of the workmen employed at the colliery affected expressed a desire for such an investigation to take place. You put it in the power of the majority of the workmen to absolutely compel the Home Office to have an inquiry?—I think if the majority of the workmen express that desire that practical response should be forthcoming from the Home Office.

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34150. Do you or do you not mean that the workmen should be supreme, or that the Secretary of State should be supreme in this matter?—My idea is this: when the workmen express that desire, that the thing should take place.

34151. You say if the majority of the workmen in any particular mine consider a second inquiry ought to be instituted, it should be in their power to compel it to be instituted. Have you known cases where you think a failure of justice has taken place owing to the second investigation being withheld?—You are putting it rather extreme to me when you ask me about the failure of justice. I do not wish to go to that extreme, but I know one case where I am fully convinced a second inquiry should have taken place.

34152. Will you give us the name of the accident?—The McLaren explosion, or the Abertysswg explosion.

34153. With regard to shot-firing, this should be carried out only under the strictest regulation and supervision. I imagine we should all agree to that. I suppose the rules are not sufficiently stringent, you think?—I believe there is one thing lacking in the rules. I think a limit ought to be put to the charge.

34154. You say shot-firing should only take place between shifts?—Yes.

34155. Would you apply that to shot-firing in the face, or only to ripping, shot-firing in the roads?—To all shot-firing.

34156. Would that be practicable in South Wales, to limit shot-firing to between the shifts?—Where it is necessary to blast in the coal it would be rather difficult.

34157. Therefore you are not quite sure, as regards blasting in the coal, whether you would not suggest that it should be invariably carried out between shifts?—Where blasting in the coal is required I am afraid that it must be done during the shift. Where the heavy charges are put in the roadways and the rippings, that ought to be between shifts.

34158. You say the caps and explosives should be supplied free, by the employers, and kept and used by competent shot-men and not distributed indiscriminately among the workmen. Is that the case now, that caps and explosives are distributed indiscriminately amongst the workmen? Is that in accordance with your rules? Would it not be a breach of a rule for that to be done?—A certain quantity. The explosive is limited to a certain quantity.

34159. Have you any suggestion to make as to the alteration of either General Rule 12 or any of the Special Rules?—The suggestion I am making is that the explosive and the caps should be kept by shot-men and not handed to the men. Now the men go to the magazine in the morning and get their allowance of explosives. Then the shot-man goes round and hands them the cap.

34160. Who drills the hole?—The workman.

34161. The shot-man stems it?—Yes.

34162. (*Mr. Ratcliffe Ellis.*) The detonator or the cap and the explosive are not given out to the same man?—The shot-man goes round the colliery and hands the cap to the workman.

34163. The explosive is given to the workmen, and the detonator or the cap are given to the shot-firer?—Yes, but the shot-firer goes round the colliery and enquires of everyone whether he requires a shot or not, and then he gives him the cap, and the cap is left in the working place.

34164. (*Mr. Wm. Abraham.*) In his charge?—Yes.

34165. (*Chairman.*) The detonator?—Yes.

34166. Surely only an authorised person or shot-firer can have any detonator in his possession at all under the Explosives Order? Sub-section B of Clause 4 of the Explosives Order says: "Shot-firers and other authorised persons shall keep all detonators issued to them until about to be used in a securely locked case or box, separate from any other explosive." You say that is not carried into effect?—It is carried into effect in this way: the shot-man goes to the working place and asks the man whether he has a hole ready or not. Perhaps the hole would not be quite ready then. Then he leaves the detonator there in the possession of the workman.

34167. He had no business to do that?—That is what is done.

34168. That is contrary to the law. If the law was carried into effect and the shot-firer and other authorised persons always kept all detonators until about to be used in a securely locked case or box, you would say that was all that was necessary?—I suppose the shot-man would be under the impression that he is fulfilling the law by giving the detonator to the workman say 10 minutes or a quarter of an hour before it was actually necessary, and then he would go on to another place.

34169. (*Mr. Wm. Abraham.*) In that case who rams the hole?—The shot-man rams the hole, but I think, as a rule, the man himself puts the detonator in the last pellet.

34170. That is what you object to?—Yes.

34171. You think the shot-man ought to have the handling of the detonator, and the man have nothing to do with it at all?—Yes.

34172. (*Mr. Cunynghame.*) You are in favour of the greater use of Section 45 of the Act, which gives the Secretary of State power to order inquiries?—Yes.

34173. Supposing that was done, and I should be inclined to agree with you to a certain extent, it would be less reason, I suppose, to have greater powers at the coroner's court. If you had a good inquiry under Section 45 in doubtful and difficult cases it would be less necessary to go into detail at the coroner's court?—Not of necessity. I believe the coroner's court certainly should execute its duty to the furthest possibility.

34174. That is plain, but we are discussing what their duty ought to be?—Yes.

34175. I will show you what I am tending to. A coroner's court is in some sense a court of criminal jurisdiction, and it is part of the criminal machinery of the country?—I am not an expert in law.

34176. That is a very fair answer. I will give you a notion of what I mean. The duties of coroner's courts is sometimes to attach blame to particular men and send them for trial for manslaughter?—Yes.

34177. If you were in the position of being likely to be committed for manslaughter, you would hardly like all sorts of people to intervene and ask all sorts of questions as of right. You would think it rather hard?—I daresay I would, if I was in that position.

34178. There was a case which occurred the other day, in which it seems doubtful whether there was not negligence on the part of two miners with regard to a cage accident. It would be rather hard if all sorts of people besides the coroner and the regular officials were to claim the right to intervene and ask all sorts of questions. It might be very hard on the men, because they are going to be possibly tried for manslaughter. I want to put the other side before you. Do you see what I mean?—All sorts of questions by all sorts of men are not allowed by the coroner.

34179. Apparently you would allow the miners to intervene and ask as of right any questions they liked. You said so just now.

(*Mr. F. L. Davis.*) Call any witness.

(*Mr. Cunynghame.*) Yes, call any witness and ask any questions. That is what you said.

(*Witness.*) By properly appointed representatives.

34180. I want to show you the difficulties?—I meant this, that the workmen as a body, through their properly appointed representatives, should have the right to call any witnesses that they thought could give evidence having some direct bearing upon the case, but that is not asking all sorts of questions by all sorts of men.

34181. I take your answer. I am not endeavouring to put upon you what you do not wish to say. If you allowed, in proceedings that might end criminally, any person to tender any evidence he liked, the person who might be committed for manslaughter might regard that as rather hard?—I daresay he would.

34182. Would it not be sufficient for your purpose that there should be a thoroughly effective inquiry under Section 45, at which all that evidence could be brought forward and gone into, and where you could ask more freely, where you had not a man likely to be tried for manslaughter. Would it not be a better way of doing it? That is what I am coming to?—Yes.

34183. Could not any defects that exist be remedied by strengthening Section 45 and using it, rather than tampering with the general law of coroners? That is what I want to ask you?—Yes, I quite agree with that.

34184. If you begin interfering with the coroners' law with respect to mines, you would have to interfere in the case of shipwrecks, where coroners have to sit, and the case of factory accidents and coach accidents, and accidents

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all over the place where anybody is employed. It would be rather a big thing, would it not?—Yes; but this section is in the Mines Act.

34185. Section 45?—Yes.

34186. Is it not better to rely on the greater use and strengthening, if necessary, of Section 45, rather than interfere with the general law affecting coroners?—Yes; but there is no use made of Section 45.

34187. You want a good, clear and effective inquiry, to make known all the causes of the accident and let everybody have their say. That is what you want?—Yes.

34188. With regard to ambulance, do you think it would be of use that in the mines there should be more ambulances than exist already for men?—I think so.

34189. In the case you gave of a man who caught cold, if you had had thoroughly good blankets ready you could have wrapped him up, so that he might have remained without any fear of catching consumption?—Yes.

34190. I mean in the case you mentioned of an accident?—That was a full journey running back and he was injured, and the main road was blocked through that; he had to be kept there some hours.

34191. Blankets would have kept him from catching cold?—Yes. It would be better if he could be taken out.

34192. Sometimes, you have said, timbering is not put up as much as it might be?—Yes.

34193. And that is done even where the men would be willing to put up timber without extra pay?—I did not say that.

34194. Are there not some employers who would rather grudge the putting up of the timber?—Yes.

34195. That is what I am driving at. I mean employers who would grudge the expenditure on the timber even though the men were willing to put it up for nothing?—Yes.

34196. That will not be in the large and thoroughly well-conducted mines?—They are all using timber as economically as they possibly can.

34197. In well-conducted mines the owners would not grudge the necessary amount of timber, whatever it might be?—They have that provision in the price list, and I think that the large collieries in the Valley that I represent are well conducted, I will say that; but after all, they have that provision in their price lists that no timber, that is a certain kind of timber, cogs and road-posts, is to be put up only when and where ordered by the management.

34198. Do you object to that rule?—Yes.

34199. Who would you give the right to decide when they ought to be put up?—The man himself.

34200. In some cases the men have only been there a week or two working. They would be rather bad judges?—Yes, if only working a week in the colliery. If they had only left the farm a week they would be bad judges.

34201. Ought not some man of a superior type to be the ultimate judge, say a fireman, or somebody. I do not know who is the right person?—A man that has a working place himself, as a rule, is an experienced man, not a man with a week's experience, certainly a man who is given a place is looked upon by the management as an experienced man, and certainly that man ought to be able to judge.

34202. Would that man have other men working under him or with him?—Yes, a boy very likely.

34203. How many as a rule?

(*Mr. Wm. Abraham.*) One man or one boy?

(*Witness.*) Yes.

34204. (*Mr. Cunynghame.*) One man and one boy?—Yes: in some places he would have more.

34205. Although in the big and well-managed mines it may not be so, in some of the worst managed mines there would be a danger of unduly economising the timber?—Yes.

34206. Have you known of chains holding the cage being annealed? Do you know anything about the annealing of chains?—I cannot say anything from my own personal knowledge.

34207. (*Mr. Ratcliffe Ellis.*) With regard to examinations under General Rule 38, you speak of the cost such examinations involve, and also say that there is a difficulty in getting the best and most experienced workmen to undertake these examinations owing to the inconvenience it causes them, because as a rule such men have boys working with them. If that is one of the reasons why this inspection under Rule 38 is not more frequent, how do you propose to remedy that?—By appointing workmen inspectors. Then I think that Rule 38 to a very large extent, if not entirely, could be done away with.

34208. You wish to rely upon more Government inspection?—Yes.

34209. So that if the Government inspection were sufficient, Rule 38 would not be necessary?—No.

34210. If Government inspection is not sufficient then Rule 38 you consider should be amended?—Yes.

34211. The safety of the mine you think should depend so far as the inspection goes, upon Government inspection?—Yes.

34212. Is not inspection under Rule 38 rather to assure the men that the place is safe. It is for their satisfaction?—It gives them an opportunity of ascertaining for themselves the state of the mine.

34213. The object of this rule is that the men may satisfy themselves that the place is safe?—Yes.

34214. If that is all, why should anybody else pay the cost of it but the men themselves?—I do not know whether I had better not answer that by asking you another question: why should that obligation be placed on the men?

34215. They can please themselves whether they do it or not. My point is this, supposing they choose to do it, who else should pay the expense but them?—I agree they should pay the expense, but I say the expense is a barrier to carrying out the rule.

34216. They would not pay the expense even to assure themselves that the place was safe?—They are doing it, but I say that it is a burden upon them.

34217. Why should it not be a burden upon them. If they avail themselves of this opportunity why should they not pay the expense of doing it. I want to know what the complaint is?—The expense.

34218. They do not think they ought to pay the expense of assuring themselves that the place is safe?—No, because the expense is heavy. In the large collieries it requires a large number of men to make examinations, and before that rule is effective the examinations ought to be made pretty frequently, and to carry them out frequently involves a large amount of expense.

34219. They are not disposed to incur that expense; they would rather leave it to Government inspection than go to the expense of assuring themselves that the place is safe?—Yes.

34220. Another reason you say is the usual indifference?—Yes.

34221. Do you find the men are indifferent as to this?—The bulk of them.

34222. They are satisfied with the Government inspection and the managers?—I do not say they are satisfied.

34223. What is the meaning of the usual indifference?—The indifference to the——.

34224. I am quoting your own words?—Yes, I know. The large number of workmen would not take the same interest in the matter as a few.

34225. They are satisfied. The great bulk are satisfied with the Government inspection?—I do not say that. You may draw that inference. I do not say it.

34226. With your permission I will draw that inference. Now with regard to the examination by the fireman, the fireman's districts are too large and their hours too many. How do you know this?—I have been doing it myself.

34227. How long ago?—Many years ago now: in my younger days.

34228. How many years since?—20 years ago.

34229. Do you think there has been no improvement in South Wales since then?—Yes, a lot of improvement.

34230. Still you think there is ground for complaint?—Yes.

34231. Can you suggest any rule which would prescribe the areas of the fireman's duties—his district?—It is very difficult for me to put it on paper or tell it here; that depends a good deal on the conditions and circumstances of the mine.

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34232. That really must be left to the management ?—Yes.

34233. Do you find generally in South Wales from information given to you—I suppose you are speaking from information given to you, not from your own personal knowledge ?—Yes.

34234. Do you find generally in South Wales that the firemen have other things to do besides inspection ?—Yes,

34235-7. Is that generally the case throughout South Wales ?—Yes.

34238. In a paragraph headed "Standard and maintenance of discipline," you say "Fines arranged between man and manager should be discouraged. Breaches of the rules should be dealt with by the magistrates. This would be much more effective as a check against the tendency on the part of some to violate rules than fines at home. One case before the Bench would be more salutary in its effect than a dozen home fines." This is all as to maintenance. What do you mean by "the standard of discipline" ?—It is a general term with regard to the conduct of the men at the mine.

34239. You do not seem to make any observations upon it in your notes ?—No. I am simply linking together the standard and maintenance.

34240. Do you think the standard of discipline is not sufficiently maintained in collieries in your district ?—In some collieries perhaps not.

34241. In what way is it not sufficiently maintained. What class of labour in the mine is deficient in discipline ?—I am simply speaking of it in a general way.

34242. What is the use of that ?—You can have a general idea of the discipline of the mine and the standard of that discipline.

34243. Are there mines in your district where there is some particular class of workman who is not disciplined?—What I mean in this paragraph is this, that there is more tendency perhaps in some colliery for the management to agree with the workmen when anything is done, when any rule is violated, there is perhaps more tendency existing at some collieries to arrange matters at home, and not to take them before the Bench.

34244. The foundation of the whole thing is that some men or man has been guilty of negligence ?—Yes.

34245. And then you object to that negligence being condoned by a fine instead of bringing him before the magistrates ?—Yes.

34246. It costs a good deal of money to take men before the magistrates ?—I daresay it does.

34247. Do you think there is any danger, if you say that breaches of discipline must be punished by taking the men before the magistrates, that they will not be punished at all ?—There is very little punishment in a fine at home.

34248. In answer to my question do you think that there is any danger if you say the only way in which you must maintain discipline is by taking people before the magistrates ? You suggest there is a danger now, but is there not a risk of that danger being greater by no punishment being inflicted ?—No, I do not think so.

34249. You think even for a trivial offence that they should go to the expense of taking a man before the magistrate ?—As I stated before, I would not include trivial offences in what I am speaking about here.

34250. What would be done with trivial offences ? shall he be let off altogether and no notice taken, or if he to be taken before the magistrates, or what is to be done with him ?—There is a vast difference between a trivial offence and an offence that involves perhaps a risk to the lives of the men in the pit.

34251. What is to be done with the trivial offences. I know there is a great difference between the two ?—I have said that could be treated at home.

34252. How—fined ?—Yes.

34253. Of course you know under the Truck Act a man has to consent to be fined ?—Yes.

34254. You think fines for trivial offences could be dealt with in that way ?—Yes.

(*Mr. Ratcliffe Ellis.*) My Lord, I do not propose to ask the Witness any question with regard to the establishment of Special Rules not because I am satisfied with the views given, but I think it is no use going over the same thing over and over again. I wish that statement to appear on the notes.

(*Chairman.*) Very well.

34255. (*Mr. Ratcliffe Ellis.*) With reference to timbering in the working places, the timbering is done by the collier in your district.—Yes.

34256. Working at the face gives a man considerable skill as a timberer, I suppose ?—Yes.

34257. You would expect to find skilful timberers at the working face ?—Yes.

34258. In the haulage road the timbering is done by expert timberers whose business is to do nothing but timbering and looking after the roads ?—Yes.

34259. You say that the great majority of accidents are in the roads from timbering ?—Not the majority.

34260. I thought you said the majority.

(*Chairman.*) 40 per cent. of the whole accidents except explosions.

(*Mr. Ratcliffe Ellis.*) 40 per cent. of the whole accidents arise from deficient timbering in the haulage roads ?

(*Witness.*) No.

34261. What do they arise from in the haulage roads ?—I do not say deficient timbering.

34262. What is it ?—Most of them by the trams and the ropes and so on.

34263. The timbering has nothing to do with it ?—No, but there are some cases by falls.

34264. So far as the timbering is concerned in the haulage roads if that were done by men appointed for the purpose you would have no complaint ?—Only I think it ought to be more uniform.

34265. It ought to be systematic ?—Yes.

34266. 40 per cent. is accidents from all causes on the haulage roads, not merely deficient timbering ?—Yes.

34267. (*Mr. Wm. Abraham.*) There are two kinds of roads: you mean the haulage roads and the roads leading from the main roads to the faces ?—Yes.

34268. On the main haulage road timber is made by special men ?—Yes.

34269. On the road leading to the faces it is done by the workman himself ?—Yes.

(*Mr. Ratcliffe Ellis.*) The most skilful men in the pit.

(*Mr. Wm. Abraham.*) I think you misunderstood him.

(*Mr. Ratcliffe Ellis.*) The most skilful man ?

34270. (*Mr. Wm. Abraham.*) The most skilful timberers are required round the main haulage roads ?—Yes.

34271. There are other classes of roads, the road leading from the main haulage road into the face, and that the man himself timbers ?—Yes.

(*Mr. Ratcliffe Ellis.*) He is the expert timberer.

(*Mr. Wm. Abraham.*) That is not an expert timberer.

(*Mr. Ratcliffe Ellis.*) The Witness agrees with me. The man getting coal at the face becomes an expert timberer. This is the man who has to do this timbering at the gate.

(*Mr. Wm. Abraham.*) Yes.

(*Mr. Ratcliffe Ellis.*) That is done by an expert timberer.

(*Mr. Wm. Abraham.*) By the collier.

(*Mr. Ratcliffe Ellis.*) He is an expert timberer.

(*Mr. Wm. Abraham.*) That is not the expert timberer you mention.

(*Chairman.*) The face and gates are timbered by one man, and the main haulage roads by another man.

34272. (*Mr. Ratcliffe Ellis.*) Now with regard to the winding apparatus, you say it ought to be examined before the men go to work. Is it your custom at present to examine it during meal-times when the pit stops for a short time during the shift ? Is that opportunity taken to examine the rope and the guides ?—I think it is as a general rule.

34273. If there were no meal-times allowed there would not be that opportunity of examining these ropes and guides ?—No.

34274. You know the rule, that they have to be examined by competent persons once in 24 hours ?—Yes.

34275. Is that insufficient ?—Yes, I think so.

34276. Do you work double shifts in your county ?—Not winding.

34277. You have no continuous shifts worked ?—No.

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34278. You know there are districts where there are continuous shifts worked?—So I understand.

34279. How would you carry out your suggestions in those cases?—Stop the pit.

34280. You would give up having continuous shifts?—No, you simply stop the pit for the purpose of examining.

34281. You suggest the pit should be stopped where there are continuous shifts in order that the ropes might be examined before the next shift begins, and the guides?—Yes.

34282. Have you any case in mind in which an accident has happened because there has not been a sufficient examination of the ropes and guides?—I have no case where men were injured, but if you look upon the case I gave as an accident——

34283. You have no case where men are injured.

(*Chairman.*) He has known cases.

(*Mr. Ratcliffe Ellis.*) Have you known cases.

(*Witness.*) I gave a case to the Chairman which happened about three weeks ago, I believe. The men were kept in the shaft for about 40 minutes or three-quarters of an hour.

34284. I did not understand you to say that was because of some insufficient examination of the ropes or guides?—Something the matter with the ropes.

34285. Do you know what was the matter?—No.

34286. You do not know whether that could have been ascertained by inspection or not?—I received a letter from the colliery, from the checkweigher, pointing this out, and he was suggesting that an examination immediately before winding the men might have possibly discovered what was wrong.

34287. Is that the only ground you have for making these suggestions? Is the ground for making all these alterations the suggestion of the checkweigher that they should be carried out?—No, for the sake of the thing itself.

34288. You do not know in that case it was a defect which could be discovered by an examination. In fact you do not know what the defect was?—I have told you I am not acquainted with the details, but I am acquainted with the fact.

34289. With regard to coroners you say that the coroners should possess to some degree an acquaintance with collieries and underground work, and the daily dialect or terms used by underground workers, so as to enable them to have a clear conception of the evidence given at their court. You are aware that coroners have to inquire into deaths from a great variety of causes?—Yes.

34290. Do you think that they should be specially qualified in this way for colliery accidents only or in every other case?—So far as South Wales is concerned, colliery accidents are by far the most numerous they have to inquire into.

34291. You told Mr. Cunynghame with a more liberal use of Section 45 you would leave coroners' courts as they are?—Yes.

34292. Do you complain of the fact that all the facts do not come out before the coroners, or is it because the decisions of the jury are not approved of by you?—All the principal facts come out, but some particular phases of those facts are not properly cleared up.

34293. All the facts connected with the accident as a rule come out?—I think, as a rule, yes.

34294. What more do you want?—According to Section 45 there are other circumstances sometimes that ought to be dealt with further, which are not dealt with by the coroner's court.

34295. It is rather to Section 45 that you would look than to any alteration of the coroners' courts?—Yes.

34296. With regard to the shot-firing, you suggest that the weight of a shot that is fired should be under some supervision?—Yes.

34297. In shot-firing in haulage roads would your view be met if there should be no shot-firing in the roads as distinguished from the face, unless under the direct instructions of some superior official who should prescribe the weight and the other conditions to be observed in firing the shot?—Yes.

34298. He would decide the weight of the shot that was to be fired and the conditions under which it should be fired?—Yes.

34299. With reference to the shot-firing in the coal, you could hardly have a regulation of that sort?—It would be very difficult.

34300. With that exception, can you suggest any amendment with reference to shot-firing?—Only what I have already suggested. I think the detonators and the explosives ought to be kept in the possession of practical shot-men.

34301. It was pointed out to you that is the law at the present time. It wants carrying out, you think?—The explosives are handed to the workmen themselves.

34302. The explosives, but not the detonators?—The explosives are.

34303. There is no harm if the shot-firer keeps possession of the detonator?—They are exploded without the detonator sometimes.

34304. Not very often?—We had a fatal accident in Rhymney last week. The detonator had been found and taken out. There was a missed shot and afterwards a portion of the explosive exploded, and the result was fatal to the man who was working.

34305. How did it explode?—That is the mystery. It was not through the detonator.

34306. Can you suggest how it exploded? Was there a fatal accident?—Yes.

34307. I suppose that will be inquired into?—Yes.

34308. Has there been an inquest?—Yes.

34309. What was the result?—The result was a verdict that the man lost his life by accident, but there was not sufficient evidence to prove how the explosive was exploded.

34310. You say in shot-firing that these explosives should be supplied free?—Yes. ✓

34311. Why?—For the purpose of the employer having entire control of them.

34312. There is no need to supply them free for that purpose. He can have control of them and be paid for them?—A man would not know exactly what he was paying for then.

34313. In cases in your county where the men have the explosives supplied to them they pay for them?—Yes.

34314. Why should they not pay for them?—For the purpose of the employer having full control. ✓

34315. He has full control. He supplies the explosive and he is paid for it?—Yes; but if the employer kept everything in his own hands the workmen would not receive the explosives.

34316. Do you suggest something should be taken off, or a less price should be paid for the work if he gets the explosive for nothing?

(*Mr. F. L. Davis.*) It is not likely.

(*Mr. Wm. Abraham.*) I have crossed the word "free" out of my copy. ✓+

34317. With regard to explosives altogether, I think it is your opinion that it would be best for the workmen to have nothing to do with either of the materials, the dynamite or the detonator?—Yes.

34318. As the employer now provides the lamp and pays for it in order to get control, you think a similar rule adopted with regard to explosives would be the means of creating further safety?—Yes, I think so. +

34319. In speaking of roads, you spoke of two classes of roads, the main haulage roads, for which there are special men provided for the timbering, and the roads leading from those into the faces, which are two different roads. You are speaking in fact of the second-class of roads where the timbering is done by the workmen themselves?—By the collier?

34320. Yes.—Yes.

34321. Independent of the question of payment at all (of course we like to be paid for things), but independent of that, you think if there was a law specifying a certain distance for timber to be put up in those roads it would be better than to leave it even to the discretion of the manager?—Yes.

34322. In the face the law prescribes props are to be put up at a certain distance?—Yes, and sprags.

34323. All necessary timber there?—Yes.

34324. In consequence, there are men to see that it is put?—Yes.

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34325. In consequence of that in South Wales the accidents in these certain places have been reduced ?—Yes.

34326. The contention you want to put before us is this, if a specific distance made by law was enforced, the timber would be put up ?—Yes.

34327. Whereas now a question of payment for timber may interfere in the minds of the management as well as the men, assuming you carry out what you suggest, it would disappear altogether ?—Yes.

34328. That really is the reason why you are advocating this systematic timbering ?—Yes.

34329. There was a time when we were against systematic timbering in South Wales ?—Yes.

34330. Our experience of late years has convinced us that systematic timbering would reduce a certain number of accidents ?—No doubt. I have been against it myself; I did not think it was necessary.

34331. It is well known we were against it. With regard to the return airway, will you give us your opinion with regard to that. Do you think that it would cause any discomfort to the workmen to travel out of the mine through the return airways if they were kept clear ?—Not in the slightest.

34332. You consider it would be much safer than it is now ?—Much safer.

34333. Would you not gain a double purpose, that is, increased safety and also increased ventilation by keeping the return airways of a sufficient size ?—Yes.

34334. You have no hesitation about advocating that as an improvement ?—Not the slightest.

34335. It would not cause any inconvenience to the workmen ?—No.

34336. You know a certain colliery where this is done ?—Yes.

34337. Have you ever had any complaints made from the men because they have to travel out through these ?—No, I think they much prefer travelling that way than the main haulage roads.

34338. It is known that we have a certain very large company in South Wales that has adopted that plan for 20 years and more ?—Yes; I think the Ocean Company has done it.

34339. It is a fact that they have never had an explosion?—Yes, it is a fact.

34340. We have something to go by in forming this opinion. Do you find by the reports at the monthly meetings in your district that complaints are often made that, with even the most competent firemen that we have, it is impossible for them to do their duties properly because of the size of the districts they have to travel through and examine ?—Yes, we hear that very often.

34341. Is it a complaint also that some accidents are happening when the men are going in in the morning. If the men travelling the roads who are supposed to examine them had time to do it at their leisure, they must have seen the cause of the accident ?—Yes.

34342. Have you had any experience of this kind? Have you seen accidents in the morning, I mean in your district ?—I can only say what I have heard.

34343. Occurring in the district you are agent of: that is what I mean ?—Yes.

34344. You have these kind of things reported to you there ?—Yes, and I have known of something like this: the men go in and find a fall in their own roads and they have to turn back. They have received no intimation from the fireman before going in.

34345. Do you put that down to the carelessness of the fireman ?—No.

34346. But because he has not time to do the work ?—He has no time to go in and out over the roads of the stalls. His principal object in the morning is to examine the faces and see they are clear of gas.

34347. Because of the distance he has to travel he has not time to go in through one road and back through another ?—No, he has not.

34348. That is my point. Have you in your district any instances of the best of your men refusing to become examiners of collieries under Rule 38 ?—Yes.

34349. It is difficult to put your finger on the reason why perhaps, but a little quarrel takes place and the next day or so you find the man is there no more ?—That is so.

34350. We do not bring this as a charge against the owners of the collieries, but a deputy has his district to attend to, and there is a complaint that the colliery man has found fault with him, and the deputy we find causes him to be discharged ?—No doubt, because he is coming into daily contact with the men.

34351. That is what I want your lordship to understand. We do not make any complaint against the owners. We know we have as good a body of general managers and owners as in any other part, but you know this to be the fact and you want to have it cleared off ?—Yes; I have no hesitation in saying the general managers, I think, are doing everything they can with regard to safety.

34352. They would invite this examination ?—They are doing it.

34353. But the man who reports defects is supposed to be the man who takes offence ?—Yes.

34354. Do you think if a new class of inspectorate were formed with a sufficient number to make the minute examination these men make, that the workmen would not require to do that ?—No.

34355. Do you know instances where the reports made by the workmen are brought in evidence by the managers to show the excellency of the condition of the mine after an accident has taken place ?—It is always the case.

34356. That may be one reason why our men have become indifferent ?—No doubt, because almost after every unfortunate explosion the last report of the men is always brought forth.

34357. With regard to coroner's inquests, you agree that the main object of a coroner's inquest is to find out the cause of the death of the men who have lost their lives ?—Yes.

34358. And not specially to inquire into the cause of the accident that caused that death ?—That is so.

34359. More than a desire to prosecute any man, it is your desire to have a more perfect court to inquire into the cause of the accident that caused the death ?—I should have thought it was made quite plain that we have no desire to criminally punish any manager or anybody else. That is not our desire.

34360. Your desire is to find out some means to reduce these accidents ?—That is so.

34361. You think in your district you have a special case where the second inquiry would have been of great value ?—I think so.

34362. (*Mr. F. L. Davis.*) You are in favour of a third class of inspector, as I understand ?—Yes.

34363. Government inspectors ?—Yes.

34364. What sort of position would you suggest he should have? Is he to be on the same footing as the present Government inspector or do you suggest a lower grade ?—My suggestion is that he should be under the control of the chief inspector, whether you call it a lower grade or not. He should be a practical examiner of the colliery.

34365. Should he have the same qualifications as the present Government inspector, or do you propose that he should pass a lower standard of qualification ?—I do not think that he should be expected to have actually the same qualifications as the chief inspector, but I think that preference should be given to workmen who possess a first-class certificate. There are a number about.

34366. He should have the qualification of possessing a first-class certificate ?—I should not put that down as an actual qualification.

34367. Something similar to the first-class certificate ?—Yes.

34368. Do you not think that possibly that might be a disadvantage. If the third-class of inspector has not the same qualifications as the present Government inspector, he could not take the present position of chief inspector ?—No, unless he was qualified. There would be nothing to prevent him qualifying, would there, in time ?

34369. No. By qualifying, I suppose you mean he would do that in his own time or after his work or something of that kind; not that he would cease his duties ?—No.

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34370. I put it to you that anybody who has had practical experience in a mine would be eligible for the post of a third-class inspector?—Yes.

34371. Do you think it necessary that he should have had charge of a mine for some time or have been in the position of a manager or under-manager?—No. I think that the best qualification for an examiner of a mine would be experience as a fireman.

34372. It has been put to us by other witnesses that the only experience worth having at all is experience at the face?—Most firemen have had that—all of them.

34373. I do not know that is so. I should have thought many men at the face have become firemen, but I do not know that firemen always become colliers. I should have thought it was the reverse, that a collier who has worked at the face may become a fireman?—That is what I am saying.

34374. Not always the fireman goes back to work at the face?—No, I do not say that.

34375. That is what I understood you to say. I will put it in this way: you would give this man who is to be inspector the same powers as the present Government inspectors?—Yes.

34376. Do you think that a man who has been a fireman and who has never had charge of managing a pit would be the man to instruct a manager when he is in the position of being an inspector. Do you think he would have the same weight in telling a manager what he should do as the present Government inspector?—Perhaps he would not, so far as the manager is concerned, but the question would be what would be the condition of the place.

34377. The present Government inspector makes his inspection and says to the managers, "I am not satisfied with the ventilation," or with something else, "you must alter this." Would a man who has only been a fireman have the same weight as the present Government inspector in telling a manager that things were not as they should be and should be put right?—As I understand it, the present inspectors can only recommend the manager. They have no authority to compel him to do it.

34378. But the inspector is a man who has passed a very high qualification?—Yes.

34379. He has passed a good examination?—Yes.

34380. Whereas you are suggesting a man in the position of a fireman should have the same authority as the present Government inspector?—Yes, or else what would be the good of him?

34381. I suggest he would not be as good, because his qualifications are not so high. However, I will leave it there. Mr. Abraham put to you that the best men in your district will not make these examinations under Rule 38, and you said that was so?—Yes, as a rule.

34382. What rate do you pay the men who examine the mines?—According to the resolutions of their committees.

34383. It may vary of course at different times. May not this have something to do with it, that the best workmen can earn more as colliers than you pay for examining for the safety of the mine?—That is quite possible.

34384. That may be a reason why the best men do not like to take it up?—Yes.

34385. I think you have been very fair in giving evidence on this point?—I have tried to be.

34386. You say that the complaints are rather general that the men suffer when they make these reports. There is nothing very definite that has come before us?—No.

34387. Can you give me a case where you have known a man who has suffered?—No, I cannot put my finger on an actual case, only when I attend the various committees I hear a lot of things at the committees, and you hear the real things at the committees. That is the general impression and, of course, no one can say directly and distinctly that that is the actual case.

34388. At your committees when there is anything wrong you, as an agent, are made acquainted as a rule?—Yes.

34389. The probability is if there had been any man who had suffered in your district, you would have heard of it?—Yes.

34390. You suggest that the fireman should only work eight hours a day?—Yes.

34391. If his shift were only eight hours, do you think he could make the two thorough inspections during the shift, having had to make one already before the men get down?—His district ought to be made to suit that.

34392. I take it a fireman's inspection of his district is not made exactly to the minute, the same every day. It is altogether affected by what he has to do during his examination?—Yes.

34393. He may have to put up brattice-cloth or move a bit of a fall, or do many things. You cannot name any specified time within which the fireman will make his inspection. Even during a shift it may not be simply a matter of going straight round: he may have to help put things right?—There may be some special difficulty that would detain him for some time.

32394. My point is generally that you consider the hours of the firemen are too long?—Yes, I have no doubt about that.

34395. (*Chairman.*) Do you now have two continuous shifts in the Welsh coal mines?—No.

34396. Your shifts sometimes last 10 hours?—Yes.

(*Mr. F. L. Davis.*) The firemen's shifts.

(*Chairman.*) The working hours do not last more than eight hours.

(*Mr. F. L. Davis.*) More than eight, but not necessarily more than 10.

(*Chairman.*) I understand it is desirable that the firemen should make the third examination, and not very long before the shift comes to an end. Therefore if he begins, he must begin two hours before the shift begins, and if it lasts 10 hours, it would be impossible, unless they were reduced to eight hours, for the firemen to work eight hours. If the shifts were reduced from 10 hours to eight hours the firemen might work a little more than eight hours probably a little more, because it is desirable that the end of the second examination should take place not long before the end of the shift.

(*Mr. Wm. Abraham.*) He would have six hours to make the two in.

(*Mr. F. L. Davis.*) You have not followed the Chairman's point.

34397. (*Chairman.*) My point is that the last examination ought to take place not more than three hours, and probably not more than two hours before the end of the shift?—Yes.

34398. Therefore if he begins two hours before the shift, and the third examination takes place two hours before the end of the shift he would have to work more than eight hours. He could not begin his third examination until he had been at work something like eight hours. He would have to work nine or 9½ hours frequently?—Another fireman could be employed to come in at the end of the eight hours.

34399. (*Mr. F. L. Davis.*) Would that be a practicable thing?—Why not?

34400. Would it be practicable, to have another fireman to examine when there is no shift following on afterwards. You would not suggest that was reasonable?—There is no work on the coal, but there is work about the roads, and you have firemen by night as well as by day.

34401. Your firemen at night would come on a little later on?—Yes.

34402. The shifts do not work. There is an interval between the two. They do not work directly after one another.

(*Chairman.*) Nearly one after the other?

(*Witness.*) The firemen practically work 24 hours.

34403. (*Mr. F. L. Davis.*) I really wanted to know what your scheme was. You say the firemen examine the main haulage roads, but not from the main haulage roads to the faces. Do you make that as a general statement, or do you mean that sometimes they do examine all the roads. You do not suggest that they never examine the roads?—No. You are referring to the morning examination?

34404. Yes.—The morning examination is practically confined to the faces.

34405. And the roads between the face and the main haulage roads they have not time to do?—No.

34406. You are not saying that they never examine the roads?—No.

34407. Sometimes they are not able to go over all those roads?—Yes, in the morning.

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34408. With regard to fines: you think only for light offences, not for serious offences, fines should be enforced?—Yes.

34409. Do you not agree that all the serious cases at the present time are prosecuted?—I am afraid not.

34410. Not all?—I think taking matches into the mine would be a very serious offence. I was on top of a mine two or three days ago, and saw an apology stuck up and signed by a certain person saying that he agreed to pay so much, and to pay for the cost of printing that apology for having matches in the mine.

34411. You think that was a case that should have been prosecuted?—I think so.

34412. I entirely agree with you. We are of the same way of thinking here. You may take it that the Commission agree that a person committing an offence which is at all serious should be prosecuted. You have said for trivial offences fines may meet the case?—Some small cases between the man and the overman.

34413. You are in favour of systematic timbering?—Yes.

34414. There will be some system you would like to see adopted, possibly not the same in every district, but the management would be the people to put that system into force and not the men I presume?—I should think systematic timbering would mean a certain distance would be fixed by law. Anything under that distance I daresay would be under the control of the management.

34415. It is a difficult thing to put by law certain fixed distances which would apply fairly and be equal for all parts of the country?—Then it would not be systematic timbering.

34416. (*Mr. Cunynghame.*) Do you mean one distance for every mine in the country?—Yes.

34417. (*Mr. F. L. Davis.*) Do you think that could be worked, because the conditions are different in different districts?—Certainly. It would be workable if you wished to enforce it.

34418. At a cost?—Yes.

34419. What distance would you suggest? I suppose you have thought it out?—Perhaps there could be some difference between rock top and cliff top. The distance could be extended under rock top, and less under cliff top. I believe those are the two general divisions of top.

34420. What distances do you think are obtained under the different classes of top?—I saw a notice on top of one of the collieries the other day that under cliff top—I may not be quite correct in my figures—the distance was not to be more than 10 ft. rock top 15 ft. What is the use of standing timber over 15 ft. You might as well stand a post in the middle of a field.

34421. Although you have not worked many years yourself, you understand the conditions of working in your district, and you know that the conditions vary very considerably?—Yes, they do.

34422. In different districts and different collieries in the same district?—Yes; I have known conditions under which you have had to put double timbering, practically one against the other.

34423. Would there not be danger in some of those places if you had a fixed distance for the whole country, where you had an exceptionally bad place? The manager might say "We are only to do so-and-so"?—But the conditions there would compel them to do it; they could not help it.

34424. Do you think it would be fair to the places that have excellent tops (parts of the country that are not troubled as we are) to fix certain distances all through the country—the same distance?—I was fully convinced that was not workable a few years ago, but I have observed during the last 10 years that accidents took place where the men themselves thought the roof was perfectly safe, and the fireman thought the roof was perfectly safe, yet a stone comes down as if it comes from the blue sky and kills the man on the spot. If timber had been put up there the accident would not have occurred. That is the position.

34425. I only put it to you as a practical matter. You know the timber used in a colliery is a very important part of the cost of working?—Undoubtedly.

34426. Nobody, I presume, wants to save timber at the risk of safety, but they do not want to use more timber than is necessary. There would be many collieries, if a fixed distance were made throughout the country as you suggest, where the cost would go up undoubtedly, and possibly with no object attained?—I do not think we can say that in the face of the past.

34427. You said the man in his place was the person to decide whether he should put up certain timber or not, and one particular colliery you mentioned where he may not put up timber except when and where ordered by the manager?—Certain timber.

34428. Do you seriously suggest the man is the man to put up that timber, I mean, to decide whether he should put up the timber or not?—Yes.

34429. And as much as ever he likes?—Within certain limits.

34430. Who is to decide on the limits. The man is to decide whether he is to put it up or not and the management cannot say anything?—Yes, I say that the man who is working the place is responsible for the safety of the place, and he ought to have the discretion to decide when and where the timber is required.

34431. He can put up any timber he likes, ignoring the management altogether?—It is not a question of ignoring the management if that is the arrangement.

34432. Have you known any man increasing his earnings a little bit when he has a difficult place, by putting up extra timber and getting paid for it. We had better come to the real position?—I daresay that has taken place, and the man tries to arrange for his work to be done without one part of it interfering with the other, that is filling the coal, timbering the place, and ripping the top.

34433. If your suggestion were adopted, the men could do that whenever they liked?—They would not do that; what pays the collier is the filling of coal, and he concentrates his efforts, as much as he possibly can, on the filling of coal. He would not leave a heap of coal in the face I daresay, to go back and stand timber for the fun of it.

34434. You have told me you have known it done, and that will do for me?—Very likely the man has stood a pair of timber or a post when he had no trams to fill, or something like that.

34435. With regard to travelling roads, you suggest that there should be separate travelling roads?—Yes.

34436. I see that you suggest you would utilise the return airways?—Yes.

34437. Not that you would make a separate travelling road along the ordinary haulage road, but utilise that as a separate road?—Yes.

34438. You know one colliery that does that in your district?—Not in my district, but I happened to visit it.

34439. Llanhilleth?—Yes.

34440. It is not very far from you?—No.

34441. That is a comparatively new district?—Yes.

34442. That is a comparatively new colliery?—Yes.

34443. Do you know whether they have always done that?—I could not say that for certain.

34444. Does it occur to you it might be difficult for older collieries, collieries not accustomed to use that as a travelling road, to begin now and use it?—There would be a difficulty, but it is a difficulty that can be got over.

34445. Would not the alteration of the size of the return airway in many cases interfere with the whole ventilation of the colliery?—It would interfere with it in the right way—by increasing it.

34446. Would it?—Decidedly.

34447. You have the machinery at the top of the pit capable of drawing up a certain amount of air?—Machinery will not draw the atmosphere from small places. It must have place.

34448. Take a colliery with a comparatively small area in the return airway, a colliery that never uses it for a travelling road: if you increase the size of that do you mean to tell me that does not interfere with your ventilation arrangements in the colliery. I am not dealing with a new colliery which you can arrange as you wish, but one you suggest altering?—It interferes, but I say in the right way. If you enlarge your return, you enlarge your current.

34449. Not unless the machinery is sufficiently strong?—Even with that.

34450. Not unless the machinery is sufficiently strong to deal with the bigger area?—Yes.

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34451. If you have a lot of air forced through a big aperture and it comes out through a small one, the ventilation must be good. The draught is good. If you enlarge the place out of which it comes it does not come so quickly.

(*Mr. Smillie.*) Your fan will go.

34452. (*Mr. F. L. Davis.*) With regard to winding apparatus, the ropes and guides are examined, you agree. You would like them to be examined before the men are let down in the morning?—Yes.

34453. Immediately before I mean?—Yes.

34455. When did this accident happen when the men were 40 minutes in the shaft? What time of day was it?—It was New Tredegar, when they were winding up in the evening.

34456. If they had been examined just before the men went down you suggest that they might have seen there was something wrong?—I am suggesting that it should be done at both ends, before lowering and before raising.

34457. Before they begin to raise them as well as before they begin to lower them?—Yes.

34458. With regard to shot-firing, you think it should be done between shifts?—Yes.

34459. Is it not generally done between shifts?—It is done between shifts in some of the largest collieries in our districts, but in others it is not.

34460. In most of them, is it not, in nearly every one, if not in every one?—This shot I referred to which happened in Rhymney was done during a shift.

34461. Was that a large colliery?—No, the New Duffryn Rhymney Colliery.

34462. Generally speaking the shots are fired between shifts in South Wales?—I believe they are.

34463. In the roads?—Yes, I believe that is the rule under the Powell Duffryn Elliott Collieries.

34464. You said it would affect places where the shots had to be fired in the coal?—No doubt. Take the anthracite district in South Wales.

34465. Outside the anthracite district, there is very little shot-firing in the coal in your experience?—Very little.

34466. Practically none in the coal?—Practically none in the steam coal.

34467. (*Mr. Cunynghame.*) You say there should be one distance of systematic timbering through the whole country. Is that systematic timbering on roadways and also working places?—Yes.

34468. What should those distances be?—That is a question to be decided.

34469. What is your opinion in regard to that. Supposing you were asked to name a distance for the whole Kingdom, what would it be for roadways and working places respectively?—Nothing more than 6 ft.

34470. 6 ft. as a maximum?—Yes.

34471. 6 ft. would not be enough in some places?—No, it would not be close enough.

34472. Then you could not have one distance for all England. If you had 6 ft. for England and 4 ft. for other places, it would not be the same?—I am suggesting that anything below that would depend upon the condition of the mine, and in many places certainly the distance would be bound to be reduced according to the conditions of the place.

34473. You are aware that 6 ft. is already the law for spragging?—Yes.

34474. You would make it also for the roadways?—Yes.

34475. Are there not many roadways where there are no props for some distances?—Yes.

34476. Would you prop all those?—Certainly.

34477. Would that not be a source of danger preventing you seeing the condition of the roof if timbered right across?—If they were timbered you would not want to see the roof.

34478. If you have a quantity of beams close together across, I mean?—Then it would be safe.

34479. I have seen roadways where there are long spaces without timber. Do you mean that the whole of those are unsafe?—No. You suggested in your question that if the roof was timbered you could not see the roof, and I said there was no necessity to see it.

34480. There are places down the stretches of roadway where there is no timber?—Yes.

34481. Would you timber all those?—Yes.

34482. Every one?—Every one.

34483. Not every place at present untimbered is unsafe?—I do not go to that extent.

34484. Why timber it if not unsafe?—Because we have seen this in our experience: places that we thought were perfectly safe become dangerous, and fatal accidents have occurred. Those safe places to-day may be unsafe to-morrow.

34485. Still, although you think those places safe you would timber them?—Yes.

34486. You said also you would give the man at the working place absolute discretion to, decide how much timber to put up?—In his working place.

34487. Supposing he put too little, would you then say he would have the right to put too little timber even though the manager thought he was not putting enough?—He could not put too little if a certain maximum distance was fixed.

34488. If the maximum distance was 6 ft. and the seam was rather crumbly it might be right to put it up much closer in certain places?—Yes.

34489. Supposing he did not put it close enough, would you give him entire responsibility and exempt the manager altogether?—No, if the manager told him to stand timber closer than 6 ft. certainly he should do it.

34490. Then you would not be giving him the entire responsibility and discretion to decide?—I said that a workman should have full discretion to stand timber where he thought it was necessary.

34491. If he does not do it you cannot get rid of the fact you are making the man the judge and not the management. Do you not think that is a difficulty? Would you not be relieving the management of their proper responsibility in other words?—In what way?

34492. By making the man the sole judge?—I do not say that the man should be the sole judge.

34493. You said he should have absolute discretion to decide?—I said he should have absolute discretion to decide to stand timbers where he thought they were necessary. At present he has not.

34494. (*Mr. Smillie.*) And be bound in addition to put them up where the manager or a competent person says he must put them?—Yes.

34495. It is only giving the workman the right to put up timbers when he thinks necessary?—Yes.

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FORTY-EIGHTH DAY.

Friday, 13th December, 1907.

PRESENT:

LORD MONKSWELL (*Chairman.*)

SIR LINDSAY WOOD, Bart.
H. H. S. CUNYNGHAME, Esq., C.B.
WM. ABRAHAM, Esq., M.P. (Rhondda.)
F. L. DAVIS, Esq.
THOMAS RATCLIFFE ELLIS, Esq.
ROBERT SMILLIE, Esq.
S. W. HARRIS, Esq. (*Secretary*).

MR. EVAN THOMAS, re-called and further examined.

34496. (*Mr. Smillie.*) Before we finished yesterday you were dealing with the question of systematic timbering?—Yes.

34497. And you were of opinion very strongly that there should be something like uniformity throughout the country as to the distances between props or supports?—Yes.

34498. You recognised fully, however, that it might perhaps be necessary to make certain rules according to the nature of the strata?—Certainly; I took all that in.

34499. What you have in your mind is that after long experience there is no roof which should be left without timbering; you think that all roofs should be timbered, no matter how good they are?—That is so.

34500. You are fully conversant with the spragging rule, the rule which makes it compulsory that spragging should be done where there is six feet on the cutting?—Yes.

34501. That is compulsory all over the coalfields, independently of the nature of the coal?—Yes.

34502. Sometimes spragging in done in coal where there is not the slightest likelihood of the coal falling down?—That is so.

34503. But it is thought to be safest to make sure, and to make the spragging universal?—Yes.

34504. You would apply the same principle to roofs?—I should apply the same principle to roofs.

34505. In all mines?—Yes.

34506. There is a very large proportion of accidents from falls taking place in collieries where the roof is considered to be very good?—Yes.

34507. And that to some extent may arise from the fact that the roof is thought to be so good that there is no timbering done?—That is so.

34508. In collieries working on the longwall system there is always what is known to miners as a creep or crush continually going on.

34509. And what may be considered a very strong roof and a very good roof to-day might be in a dangerous condition to-morrow?—That is so.

34510. If the principle which you aim at was carried out, you would perhaps leave the details to be thought out by some joint committee of workmen and employers as to the distances between props—if the principle of systematic timbering were carried out?—Yes, if the principle is adopted.

34511. You know the Section of the Act of Parliament dealing with the employment of boys and women above ground. Sections 4, 5 and 6 of the Act deal with the employment of young persons and women about the surface, and provide that there must be an interval for rest and food allowed during the shift?—Yes.

34512. You are aware that the same provision does not apply to the employment of young persons underground?—That is so.

34513. There is no provision made in the Act of Parliament?—That is so.

34514. So that lads of tender years may be employed continuously for a whole eight hours' shift underground without any rest for food, and so on?—That is possible, so far as the law is concerned.

34515. Is there anything in the nature of the employment underground which should enable young boys to go on without food any more than on the surface?—No. It would be the other way about, I should think.

34516. You would think that if there is any need for the protection of lads above ground there should be some provision made for the protection of lads underground, too?—Most decidedly.

34517. And if an Act of Parliament providing for an eight-hour day was carried out, there would be more necessity than ever that protection should be given to young persons?—Yes.

34518. Would you suggest to the Commission that some provision should be made in any new legislation to provide for a rest for lads underground during the shift?—I should think so.

34519. You are very strong on the point that one of the qualifications necessary for colliery managers and mines inspectors is practical experience?—Yes.

34520. And so far as practicable a part of that practical experience should be gained at the working face?—Yes.

34521. You think that that, perhaps, is the best part of the education of a mining engineer or a mines inspector—experience which would be gained at the working face?—Yes; no doubt that would be the base of all his experience.

34522. Would you tell us at what age lads are allowed to start at the coal face in Wales? Is there anything to prohibit them starting at 14 years of age?—Nothing. There is nothing to prevent them starting after 13 years of age if they have passed their standards.

34523. So far as the Mines Act is concerned there is nothing to prevent them?—No.

34524. And it is a pretty common thing perhaps for them to start with their father at the working face?—Yes.

34525. It was suggested yesterday that in view of the fact that lads did not start at the coal face until they were 18 year old, they would not have so much time then to get experience at the coal face, if we were to insist upon that. It is not the case that they do not start until they are 18 years old; thousands of lads start at 13 and 14 years of age to work at the coal face?—Yes, the majority of them.

34526. The majority of them, so far as South Wales is concerned, start at that age?—Yes.

34527. So that that need not be taken as a difficulty, that there would not be time afterwards for them to get their experience?—Not at all.

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34528. Do you think that some provision should be made in the Education Act for giving some knowledge of mining, mine gases, and the danger of mines, to lads in a mining district before they go underground at all?—I think some instruction ought to be given to lads at the elementary schools in colliery districts, especially with reference to the use of the lamp and the nature of gas, and how to test it.

34529. I suppose we may take it that 75 per cent. to 80 per cent. of the lads in a mining district are likely to find their way underground?—Yes.

34530. In view of that, it would be a wise precaution to give them some knowledge at the elementary school as to the use of a safety lamp, the nature of gases, and generally the dangers by which they are surrounded?—Yes, no doubt.

34531. And it would not be at all a bad thing if they were instructed in the Mines Act and the Special Rules before they went down, would it?—No, not at all.

34532. I suppose that it is a fact not one half of the miners understand fully all the Rules that they are supposed to obey?—I am afraid that is the fact.

34533. I suppose we might take it that a very large proportion of the officials of collieries do not understand at all times fully all the Rules they are supposed to?—Very likely.

34534. And it might tend, and probably would tend, to greater safety and greater discipline if the lads had some knowledge of mining in the way which you indicate before they went underground at all?—Yes. It would awaken an interest in their minds with regard to the calling that they were going to be engaged in.

34535. Would you, or your miners, be in favour of provisions being made at the collieries for enabling workmen to wash and change their clothes before going home after coming up from the shift?—Well, I think in time the miners would adapt themselves to that system if the system was established. Perhaps they would have some little prejudice at the beginning, but in time I believe they would come round to it.

34536. Perhaps I might put it in this way: would you yourself from your own experience in an important mining district be in favour of such a course being taken?—Yes.

34537. It would rather encourage the workmen in that direction?—Certainly.

34538. I suppose we may take it that all the Welsh miners have not bath-rooms at home?—No, unfortunately, they have not.

34539. A very small proportion of them have bath-rooms?—Yes.

34540. And in most cases the houses, while fairly good for miners' houses, are rather limited with regard to giving them very much opportunity of washing thoroughly at home: there is not very much provision for thorough cleansing at home?—There is not.

34541. It must be done under rather restricted conditions where it is done?—Yes.

34542. And from the health point of view it would be just as well that provision should be made for leaving pit clothes at the pit, to be dried there?—Yes, no doubt.

34543. There would certainly be less trouble at home? Yes.

34544. You are of opinion that in time the miners of this country would adapt themselves to that?—I think they would.

34545. And if once established you do not think there is any likelihood of their going back to the old state of things?—I do not think so.

34546. You gave us some information yesterday about coroners' inquests. You are not altogether satisfied with the present system, I think?—No, not altogether satisfied.

34547. It is left largely in the power of the coroner at the present time to make an inquest either a thorough examination or to stultify it very largely?—Yes: I believe he has absolute power in his own court.

34548. And while I suppose in your experience some coroners have done everything in their power to bring out all the facts and to give all opportunities for bringing out the facts, yet in other cases they do not act in the same way?—No.

34549. Do you know any coroners in South Wales who set themselves pretty much against giving opportunities to the representatives of the men of taking part in the court?—I should not like to mention any particular name.

34550. We do not want you to mention any names, but if it is true that some of the coroners in South Wales are not so ready to give opportunities as others, I should like to know, without asking you to specify any particular coroner.—No doubt that is the fact.

34551. You know of that of your own knowledge?—Yes.

34552. You have taken part in a considerable number of coroners' inquests yourself?—Yes. I think that I have had an opportunity of appearing before most of the coroners in South Wales from time to time.

34553. I think you were appointed as one of two representatives on behalf of the South Wales miners, to attend the McLaren inquest?—Yes.

34554. It occurred in your district—Yes, in my own immediate district.

34555. That was at Abertysswg?—Yes.

34556. I think on that occasion there was a fairly full enquiry made, at least?—Yes.

34557. You had an opportunity of going down the pit to make an examination of the place where the explosion was supposed to have originated?—Yes.

34558. You went down with the manager?—With the manager, and with you.

34559. The workings were supposed to be free from danger, and clear of explosive gas on the day that we went down: they had been examined that morning, I think it was said?—Yes, I think so: it was supposed to be so.

34560. Did you reach the point at Amos's Barry heading at which the explosion was supposed to have taken place?—You did not reach the point which was your objective, I think?—No; we failed to reach the furthest point, the actual point that we were in search of.

34561. What was the cause of your failure to reach that?—An accumulation of gas.

34562. I suppose you did not discover the extent of it. You turned out of it immediately you found that there was any gas?—Yes: only we could gather from the point at which we entered into it what the extent would be by looking at the map of the workings, and there was bound to be a very considerable body there.

34563. You considered that there was almost 60 yards of roadway full of gas there?—Yes.

34564. You remember, I suppose, what was thought to be the cause of the original accumulation of gas there. A very large fall had taken place?—A very large fall had taken place in the part called Amos's Barry.

34565. Amos's Barry, along the working face?—Yes.

34566. Now, men were engaged, instead of clearing away the fall, in going along the coal face to reopen the coal face?—Yes, to work round the fall.

34567. And at Amos's Barry that was the intake of the air course?—That was the intake part.

34568. And round on what is called Death's Heading, on the other side, was the outake from that side?—Yes, and Morgan's Heading.

34569. And Morgan's Heading, as a matter of fact, and Talybont Heading?—Yes.

34570. I suppose there would be less danger in men working on the coal in the intake than at Talybont—at the outlet?—Yes.

34571. Was it not believed that there was a very large accumulation of gas where that fall had taken place, and it was known that gas was being given off every day from there?—Yes.

34572. The workmen were started at the return end of that fall where the gas had been given off—they started to work through?—Yes: men were working there the night the explosion took place.

34573. You formed the opinion that in all probability that was the cause of the explosion?—Yes, in all likelihood.

34574. I think it was proved in court that the Inspector of Mines had called the attention of the manager on more than one occasion in writing to the state of the ventilation in that mine prior to the explosion?—Yes, on several occasions.

34575. The Assistant Inspector of Mines had been there on two occasions at least, and had examined the workings and the return airway?—Yes.

34576. And at some of the working faces he found a cap on the lamp?—Yes: that was on the actual morning before the explosion—the last visit.

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34577. On the day on which the explosion really took place ?—He was there in the morning, and the explosion took place that night, about 11.30.

34578. And he found gas in some of the working places on that morning ?—He found a cap there in the actual working face, from one-eighth of an inch to half an inch.

34579. And for some hundreds of yards a cap was shown continuously along the whole of the return airway ? —Yes.

34580. And the air going from that pit, McLaren No. 1, went up an upcast shaft and aired another pit up to the upcast—it ventilated the other pit where the upcast shaft was ?—Yes.

34581. The air going from that return airway went into another seam and ventilated it ?—Yes: the air that ventilated the No. 1 went into the No. 2 pit, and ventilated that, and No. 2 was the upcast.

34582. The fan was on No. 2 pit, and it was the upcast shaft ?—Yes.

34583. Was it not admitted that on the night of the explosion the revolutions of the fan at No. 2 pit had been reduced, and the speed of the fan had been reduced for 20 minutes before the explosion took place ?—Yes: that was the fact stated at the inquest.

34584. That was admitted. There were 15 men fatally injured, and about 16 more or less seriously injured ?—Sixteen men lost their lives.

34585. There were about the same number injured ?—Yes.

(*Chairman.*) I do not quite understand what your object is, Mr. Smillie, because the whole of this matter was gone into, and a report has been issued in the form of a Blue-book. What is the object in taking the witness through this; do you propose to bring out any new facts or to show that the inquiry was not properly conducted ?

(*Mr. Smillie.*) On two or three occasions the miners have requested the Home Secretary to order a second inquiry.

(*Chairman.*) You wish to show that the inquiry was not exhaustive ?

(*Mr. Smillie.*) I want to give at least our reasons here for asking the Home Office to do that.

(*Chairman.*) Your object is to show that you are not satisfied with the report in the Blue-book; and you suggest that the report in the Blue-book ought to have been supplemented, as I understand ?

34586. (*Mr. Smillie.*) I suppose you formed the opinion that there had been gross carelessness in connection with the management of this colliery ?—That would be the natural inference to be drawn from the facts ascertained, especially with regard to putting men to work at the out-take end of the accumulation of gas.

34587. You being present at the inquest, heard the evidence of some mining engineers who stated that in their opinion the men should be allowed to work under the conditions that they were working there ?—Yes: they stated that there was no danger in one-eighth of an inch of a cap.

34588. You were fireman yourself for some years ?—Yes.

34589. Do you think that it is safe for workmen to work in an atmosphere which shows a cap on a lamp of one-eighth of an inch ?—No, I do not think it is safe, for this reason: when one-eighth of an inch of a cap appears on the flame that is a clear indication that you are within the range of danger, and should anything at that moment happen to the ventilating apparatus, then the danger immediately increases; you have no margin there between the line of safety and the line of danger.

34590. You think that in all cases where a cap of that nature is shown on a safety-lamp it is time for the men to be withdrawn until the ventilation is improved ?—Most decidedly.

34591. In this case the men were allowed to work away in face of the warning of the Mines Inspector that the ventilation was not as it should be ?—Yes, the men were allowed to work in No. 2 after the inspector recommended their withdrawal.

34592. There was no prosecution of any person in connection with that, so far as you ever heard ?—No.

34593. From the information which you and the other miners' representatives secured at that inquest, and your desire that the matter should be gone into more fully again with an independent tribunal, you were a party to approaching the Home Secretary to ask for a new inquiry ?—Yes

34594. You think in a case of this kind a coroner's jury, and even a coroner himself, may not be in the most independent position to go thoroughly into a question of an explosion of this nature: I will put it that generally the local circumstances make it impossible for them to be as independent as a court appointed or a person appointed by the Home Secretary would be ?—No doubt that is so.

34595. That was one of your reasons for asking that a further inquiry should take place ?—Yes: and we felt very strongly that the Home Office should have taken steps to further consider the opinion given by the mining experts with regard to gas and that that should be refuted.

34596. One thing which made it more than ever necessary that there should have been another inquiry was the conflicting evidence of mining experts, some of whom said that a cap on the lamp was not dangerous and others said it was dangerous ?—Yes.

34597. In view of the opinion expressed by mining experts of very high standing, could you tell us whether or not any of the mines in Wales at the present time are being worked under circumstances such as were found in the McLaren colliery ?—I do not think they are. The slightest indication of gas is looked upon as a sufficient reason not to allow the men to work there.

34598. So that it is generally considered to be necessary to withdraw the men where a cap is shown on the lamp ?—Yes: and I think these experts themselves do not carry out in practice what they stated in evidence.

34599. You do not think that they themselves would have allowed the state of things which was there present to continue ?—No.

34600. Then it must have been that that opinion as given by them in that case was given in order to screen or save some person.—That is a conclusion which we must arrive at.

34601. Have you a very large proportion of unskilled workmen in the mines in Wales ?—Yes, no doubt.

34602. Persons who have not previously had any experience of undergrcund working ?—Yes.

34603. Do you think that the employment of such labourers is a source of danger to themselves and generally to the other workmen ?—Yes, there is no doubt about it.

34604. Even when it is under proper supervision it is still a danger ?—Yes.

34605. But it becomes more so when it is not properly supervised by skilled persons ?—Yes.

34606. Is it the case that sometimes unskilled persons who may not have been many weeks in the pit are sent into some of the roads to put away rubbish in old goafs, and bye-roads ?—That is generally the work that they are put to do.

34607. And that is really a dangerous work to perform, is it not ?—The work is performed in dangerous places; the work itself would not be dangerous.

34608. That is what I mean. I mean sometimes the very fact that they are putting this debris or stuff away into old ends and by-places might form a danger of itself ?—Yes.

34609. Because that is where you are likely to have an accumulation of gas if there is gas about ?—Yes.

34610. And an unskilled person who has no knowledge of gas or lamps might be working under most unsafe conditions not only for himself but for the whole of the men in the mine ?—That is quite possible.

34611. And have no knowledge of it himself ?—Yes.

34612. So that you think it should be necessary under circumstances such as those that such persons if employed at all should be continually under the supervision of a skilled person ?—Yes, I should think so.

34613. (*Chairman.*) There are one or two questions which I should like to ask you with regard to this McLaren explosion. What I understand you to say is this; that you find fault with the verdict of the jury. You do not suggest that all the circumstances were not fully gone into, but what you say is that the jury did not properly appreciate the expert evidence, or, at all events, they were deceived by the expert evidence that was brought before them, and, consequently, did not bring in a verdict which would have resulted in a prosecution, as they ought to have done ?—I do not think I ought to go to the extent of finding fault with the coroner's jury's verdict, but what we felt about it was this, that a further inquiry ought to have been made by the Home Office with regard to the circumstances attending the explosion itself, and also the

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coroner's inquiry: that something should be done to turn back the expressed opinions of the experts at the coroner's inquiry.

34614. You think there ought to have been a further inquiry with a view of getting further expert evidence to contradict the expert evidence which was given before the coroner?—Yes.

34615. But the Home Office has at its disposal any amount of expert evidence which could be given to them without any official inquiry of any sort or kind: the Home Office might, upon reading this expert evidence always ask the mine inspectors for their evidence, and ask for mining engineers' evidence, and they might go into the evidence themselves perfectly well without having any further inquiry. Therefore as I understand it, the objection which you bring with regard to the McLaren accident is this, that the Home Office ought, having regard to the facts of the case, all of which were brought out before a coroner's jury, to have come to the conclusion that someone was to blame, and to have ordered a prosecution. That is, as I understand, the objection which you raise. The Home Office had before them, according to Mr. Martin's report, the whole of the evidence with regard to this matter, they had every single fact before them on which they could form an opinion as to whether or not a prosecution of the officials, or of any official, was desirable. They had all the facts; there is no dispute about that?—Yes, I believe they had all the facts.

34616. What you object to is that the evidence was brought forward, as you think, with a view to shielding the officials, and you think, that if you had further expert evidence it would have contradicted the expert evidence which was brought before the coroner, as I understand?—Yes, the expert evidence gave a certain interpretation to the facts which were ascertained, and certainly we should say that that interpretation was not the correct interpretation to be placed upon those facts.

(*Mr. Smillie.*) Our chief point was this, that if it could be taken for granted that the conditions under which this colliery was being worked previous to the explosion were satisfactory, then all other colliery managers in Wales and elsewhere would be entitled to work their collieries when it was clearly proved that air in the return airways and the working faces shewed a cap on the safety lamp. We felt that we could not allow a state of things of that kind to continue.

34617. (*Chairman.*) But I ask the witness whether he does not acknowledge, so far as I understand—certainly Mr. Martin acknowledged it in the fullest manner—that all the circumstances of the case were fully brought out before the coroner. Would it have furthered your case to have had a second inquiry? What more could have come out at the second inquiry than came out at the first inquiry; what facts could have been brought out?—I have admitted that I think all the facts were brought out, but then there was a certain interpretation placed upon those facts at the coroner's inquiry, and certainly we thought it was the duty of the Home Office to make a further inquiry especially into that interpretation.

34618. That is, I daresay, where the Home Office may have felt a difficulty, because their own inspector said to them, "I have all the facts before me." That inspector was not in the least bound by the opinion of any expert witness: he could form his own opinion on the evidence and advise the Home Office. So that I understand the quarrel which you have with the Home Office is not so much that they did not have a second inquiry as that they were badly advised by Mr. Martin, the inspector, and that he ought to have told them that on the evidence which was brought before the coroner they ought to have come to the conclusion that the mine was not properly worked, and that in future men should always be withdrawn on the appearance of any cap such as was shewn?

(*Mr. Wm. Abraham.*) But the matter is much more serious than that, in our view. This is a case where the inspector himself had recommended that the men should be withdrawn.

(*Chairman.*) I quite understand that, but then my point is that the whole of the facts were before the inspector and the Home Office.

(*Mr. Wm. Abraham.*) Yes, so far as the cause of death was concerned. We say it is laid down, as Mr. Pickering pointed out yesterday, that the coroner finds out the cause of death, and when he is satisfied as to the cause of death his business ends, and he makes no inquiry into the matter which caused the death. In this case one of the most important points was the incompetency of the man who managed the mine and his refusal to carry out the recommendation of the inspector, and the fact that there was a man under whom he was trained—a great mining engineer—giving it as his expert opinion that a cap of so much height on a lamp was not dangerous. There was a further fact proving that part of our case which has been brought out for the first time publicly here this morning, which could not be brought out at the coroner's inquest.

(*Chairman.*) What fact?

(*Mr. Wm. Abraham.*) The fact that these two men with this manager in his own colliery after the explosion went into a body of at least 60 yards of gas.

(*Mr. Ratcliffe Ellis.*) That was after the accident.

(*Mr. Wm. Abraham.*) Yes, after the explosion.

(*Chairman.*) That might be a reason for a further investigation.

(*Mr. Wm. Abraham.*) Certainly, it is a very strong reason. It is a question of the incompetency of the manager, and there is no reprimand of that manager to-day or anything done with regard to his certificate so far as we know. We went to the Home Office and proved to them from their own Blue-books of the Report of a Commission of some years' standing, that any cap on a lamp was to be considered dangerous. We wanted them to refute that at once—to bring it to the knowledge of the mining world that the opinion was a wrong one, and that it was not safe for any manager to be allowed to manage a colliery when that was the state of things.

(*Chairman.*) Yes, but then the Home Secretary or the Mines Inspector always have done that without a second inquiry. How would a second inquiry have further elucidated the fact that a cap on a lamp was dangerous?

(*Mr. Wm. Abraham.*) The second inquiry would be held by different men who would condemn that opinion.

(*Mr. Ratcliffe Ellis.*) If it did not, I suppose it would be no use.

(*Chairman.*) I quite understand the strong feeling that there is on the subject, but my only point is what good could you have got out of a second inquiry, because every one of these facts was before the Home Secretary and before the Inspector, and it was perfectly open to the Home Secretary or the inspector to make any report they pleased upon the proceedings at the coroner's inquiry, or, if the Home Secretary had thought it desirable, he might, notwithstanding the verdict of the coroner's jury, have ordered a prosecution.

(*Mr. Wm. Abraham.*) It is not a question of prosecution with us.

(*Chairman.*) This is a very important matter, and I do not want it to be considered that the matter is being shirked in any way. You are rather in the position of a man giving evidence on behalf of your side.

(*Mr. Wm. Abraham.*) We feel it very strongly that the Home Office did not do what we considered they ought to have done.

(*Chairman.*) The reply of the Home Office was as follows: "Sir, I am directed by the Secretary of State to say that he has considered carefully the representations made to him by the deputation from the Miners' Federation which he received on the 12th instant, and has in the light of them reviewed the whole case of the explosion in September last at the McLaren colliery, Abertysswg. He has also transmitted the important statements which were laid before him to Mr. Martin, H.M. Inspector of Mines for the district, who has recently visited the colliery and is giving the case special attention. Having regard to the fact that the inquiry before the coroner was very careful and thorough, and in view of the detailed discussion of the evidence given thereat, to be found in the reports made to the Secretary of State by Mr. S. T. Evans, K.C., M.P., and Mr. Martin, which will be published, Mr. Akers-Douglas is satisfied that no re-opening of this case would lead to different conclusions or to any substantial addition to the knowledge available for future guidance." I suppose "different conclusions" would be the words which you would object to; you would say that possibly if there was a second inquiry a different conclusion might have been arrived at?

(*Mr. Wm. Abraham.*) Yes, distinctly.

(*Chairman.*) But you would hardly suggest that a second inquiry would have added to the knowledge available for future guidance, because all that knowledge was already in the possession of the Home Office and the Mines Inspector, surely?

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(*Mr. Wm. Abraham.*) It would add to the knowledge of the Home Office, at any rate, this, that here was a man who, after the explosion had occurred, led these two men to a body of gas 60 yards long.

(*Chairman.*) That is a somewhat different point.

(*Mr. Wm. Abraham.*) That is why we feel so strongly that the men are allowed to be managed by incompetent persons.

(*Chairman.*) Then your point would be that independently of investigation into the cause of the explosion, you would suggest that a further investigation ought to be held with a view of showing, from a state of facts which occurred subsequently to the explosion, that the manager was an incompetent person?

(*Mr. Wm. Abraham.*) Yes.

34619. (*Mr. Ratcliffe Ellis.*) I should like to ask the witness a question upon that. Of course, you know that the object of this Commission is to make any recommendation which occurs to the Commissioners as reasonable for the more safe working of mines; that is the great object of this Commission?—Yes.

34620. You suggest, as I understand, that it ought to be obligatory upon the Home Office to appoint an inquiry under Section 45 whenever they are asked to do so by the workmen?—Yes.

34621. And that, you say, would be conducive to safety. The main reason which you give for that, as I understand, is that with regard to this accident to which you refer in South Wales the coroner's jury did not come to the conclusion which you think it ought to have come to. Is that so, or did you agree with the verdict of the jury?—So far as the verdict goes, I do agree with it, although it might go a little further. I do not exactly remember the terms of it now.

34622. You do not suggest, as I understand, that all the facts connected with the explosion, that is to say, preceding the explosion (I will deal with those which, happened afterwards) were not brought out; I am speaking first of the facts; the expert opinion we will come to in a moment?—I have admitted that all the facts were brought out.

34623. What you complain of, I suppose, is that the owners, who are generally the persons who do these dreadful things, misled the jury by bringing expert evidence, and drew improper conclusions upon those facts?—Yes, we complain of that expert evidence.

34624. I suppose they are entitled to have expert evidence; an owner or a manager who is put in peril is entitled to be heard at these coroner's inquests; you would not object to that?—Not in the slightest; certainly not.

34625. And he is entitled to bring such evidence as he may think will justify his position?—Yes.

34626. Do you suppose that this expert evidence misled the inspector as well as the jury?—No, it did not mislead the inspector in the slightest degree.

34627. He knew all about it?—Yes.

34628. You are aware that it is quite competent for an inspector to prosecute a manager whether the jury exculpate or whether they do not exculpate him, if in the view of the inspector he has committed any offence?—Yes.

34629. So that I do not see, so far as the coroner's jury is concerned, that there is anything to complain of with reference to that. Your complaint is that the inspector did not prosecute the manager?—No.

34630. Then what is your objection?—Prosecution is not my end in view: I am not pleading for prosecution; what I am pleading for is that the proper interpretation should be placed upon the facts ascertained, and not the interpretation given at the coroner's inquest.

34631. But I understood Mr. Abraham to say just now that this incompetent manager was still managing mines?—Yes.

34632. It was your complaint that his certificate was not cancelled.

(*Mr. Wm. Abraham.*) We have not said that.

(*Mr. Ratcliffe Ellis.*) You said a short time ago that this man who led these men into the gas is still manager of a mine.

(*Mr. Wm. Abraham.*) Yes.

34633.—(*Mr. Ratcliffe Ellis.*) Then you do not complain that he was not prosecuted?—That is not my complaint at all; I have nothing to do with prosecution.

34634. I want to get it in the Notes that so far as the prosecution was concerned, the inspector was quite at liberty to do that without any further inquiry at all?—I suppose that he was.

34635. Well, you know that he was, under the Act of Parliament. Then it is suggested that after the explosion this manager took men into gas. You say that he did that?—Yes.

34636. That was nothing to do with the deaths of the persons, but that was another offence or indiscretion, whatever it may be, on the part of the manager?

(*Mr. Smillie.*) I do not think he was to blame for that.

(*Mr. Ratcliffe Ellis.*) But Mr. Abraham said a short time ago that this man after the deaths took these men into gas.

(*Mr. Wm. Abraham.*) Yes.

(*Mr. Ratcliffe Ellis.*) Now Mr. Smillie says he does not think he was to blame for it.

(*Mr. Smillie.*) We do not say he was incompetent because he did that, but we put that in in order to prove the state of the mine even after the accident.

(*Mr. Wm. Abraham.*) It does not prove that he was competent, at any rate.

(*Mr. Ratcliffe Ellis.*) We want to see where the present administrative powers of the Home Office are defective.

(*Mr. Wm. Abraham.*) Quite so.

(*Mr. Ratcliffe Ellis.*) Then he did not do anything wrong in taking them into gas. It was probably necessary?

(*Witness.*) I think it was under the impression that the place was clear, and he simply walked into it.

34637. How long after the accident was it?—A few days afterwards: I could not tell exactly how many days.

34638. It was in the course of the exploring?—Two days after the explosion.

34639. But he was exploring the pit and trying to get it right again?—Yes.

34640. So far as the manager was concerned in this offence which he committed, it was an offence which you committed and Mr. Smillie committed at the same time?—Quite so.

34641. So that you do not blame him for that?

(*Mr. Smillie.*) But we were not responsible for the management.

(*Mr. Wm. Abraham.*) They were being taken down to see a safe pit, and yet they went into a body of 60 yards of gas.

(*Mr. Ratcliffe Ellis.*) You do not blame the manager for going into the gas?

(*Witness.*) No; I believe he did it quite accidentally.

34642. What facts, for instance, do you expect would come out if you had an inquiry; more than came out before the coroner's jury?—That fact could be brought out. It could not be brought out at the coroner's inquiry.

34643. But that fact would be this, I suppose, that after the accident there was a considerable amount of gas in this pit?—Yes.

34644. Was the inspector with you at the time you made this inspection?—Not that day.

34645. But did he know about this; did you communicate this fact to Mr. Martin?—I did not.

34646. Why not?—It was not my business.

34647. Whose business is it, then?—The manager's.

34648. Have you no responsibility? You went down in the interests of the men, I suppose?—Yes.

34649. And have you no responsibility, if you find things which you consider dangerous, to communicate that fact?—Responsibility to the men. I reported the fact to the men.

34650. But is it not your duty to communicate that fact to the inspector if you consider it very material?—Well, no. If I were simply down the mine, examining on my own responsibility, I would, but the manager and Mr. Smillie were there.

34651. But, surely, when you go down there representing a large body of men it is a much more serious responsibility than if you go simply to represent yourself?—I reported the matter to the men because they were investigating the pit with a view of satisfying themselves with regard to the state of the pit before restarting work.

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34652. Did you make a report to the men?—Yes.

34653. That would be sent to the inspector, inasmuch as you had a complaint to make under Rule 38?—Not of necessity.

34654. Absolutely of necessity?—But I was not examining under Rule 38.

34655. Was anybody examining under Rule 38?—Yes, I believe the men did.

34656. And they saw as much as you did?—I do not know.

(*Mr. Ratcliffe Ellis.*) I understood Mr. Smillie to say a moment ago that whilst they were in this gas the men came round who were examining for the men.

(*Mr. Smillie.*) No; when we came back out of that part we met them.

34657. (*Mr. Ratcliffe Ellis.*) If you had thought fit you could have communicated to the inspector this state of things?—I could, certainly.

34658. And you did not think it worth while to do so?—No; that is not the proper interpretation to be placed upon my act.

34659. Well, you did not do so?—I did not do so.

34660. That being so, what more could you have got out of the inquiry. Supposing the Home Office had given an inquiry, what more do you expect would come out of it than the knowledge which you had, and which you could have communicated to the inspector if you had wished to do so?—Shall I put it in my own way?

34661. Certainly.—There is certain evidence given at the coroner's inquiry; that evidence is on record, and so far as the public is concerned, that evidence is accepted, that one-eighth or a quarter, or even half an inch, of a cap is not dangerous. What we wished to see was that certain evidence should be given at an inquiry by the Home Office that would refute that evidence. There is another fact: Mr. S. T. Evans himself in his report states that he is not satisfied with regard to the wisdom or otherwise of allowing men to work at the return end of that accumulation of gas. They knew there was accumulation of gas there, and they placed men to work at the return end of that accumulation of gas, and anything that would occur to disturb that accumulation would inevitably bring the gas down upon these men—it could not be helped. Mr. Evans in his report says that he is far from being satisfied on that point.

34662. I think in South Wales you have some confidence in Mr. S. T. Evans?—Yes.

34663. He represented the Home Office?—Yes.

34664. Do you think he allowed matters to pass that should not have been allowed: do you think the jury were allowed to come to conclusions without having the case fairly put before them, Mr. Evans representing the Home Office?—What Mr. S. T. Evans says is that under the circumstances he does not recommend a prosecution. We do not want a prosecution, and you are very desirous of pressing us to admit that. We do not want a prosecution; that is not our object.

34665. I am desirous of ascertaining from you what more could have been gained if a second inquiry had been ordered in this particular case than was brought out by the coroner's inquest and the information given to the Home Office. What further information could have been obtained?—Another set of interpretations given by experts equal in experience and knowledge to those gentlemen who have given their interpretation at the coroner's inquiry.

34666. (*Mr. F. L. Davis.*) Is this the fact, that your reason for wishing for a second inquiry was not that you wished the manager to be prosecuted, but that you wished a second inquiry for the purpose of drawing the attention of the public again to all those facts as to the explosion so as to be a warning to other managers not to allow their men to work under such conditions?—Yes.

34667. (*Chairman.*) And, as I understand, your further object was to produce expert evidence which might have convinced the public that it was dangerous to work when a cap was shewn on a lamp?—Yes. There are two prominent facts in the case, and I think proper observation in the future ought to prevent the same thing occurring again: those facts are, putting men to work at the return end of an accumulation of gas, and allowing men to work where a cap appears on the flame.

33668. But then Mr. Evans himself had commented against the setting of men to work in the return airways under the circumstances, and all the questions with regard to a cap of gas were questions which were perfectly well known to Mr. Martin, and he was an expert in the matter, and he would not be guided by expert opinion that was contrary to his own view. Therefore, as regards the view which Mr. Martin took, you could not imagine that his view would be for a moment altered in any particular by holding another inquiry.—No, not at all: but may I be allowed to say this. The reports of Mr. Martin and of Mr. S. T. Evans, so far as the public is concerned, are absolutely out of sight—the public knows nothing at all about their reports.

34669. Would it have known anything more about the second inquiry?—Yes, certainly. The second inquiry would give local publicity to the whole concern.

34670. I understand, at all events, the view of the men is that it is desirable to bring in public opinion in these cases in order to strengthen the hands of the inspectors against the management, I suppose that is the view?—Well, the men themselves do not know anything at all about them.

34671. Well, not against the management but with a view to strengthening the hands of inspectors in any suggestions that they may make with regard to the safe working of the mine.—Yes.

34672. You think the opinion of the public might very well be an important factor in your view of the case?—What I meant by the public opinion was more especially the opinion and the knowledge of the workmen themselves. So far as the body of workmen in South Wales are concerned, they are not acquainted with the contents of the reports of Mr. S. T. Evans and Mr. Martin.

34673. But do you suggest that any amount of public opinion expressed on the part of the miners would influence Mr. Martin one way or the other? Would he not as a mine inspector have formed his own opinion, being an expert himself, and would he be influenced by the miners' opinion or by the manager's opinion?—No, not at all, I think.

34674. (*Mr. Smillie.*) The full finding of this jury appeared in the South Wales papers?—Yes.

34675. And the evidence which led to that finding also appeared?—Yes.

34676. The miners would read it?—Yes.

34677. And all the colliery managers would read it?—Yes.

34678. And in the face of the evidence given the jury came to the conclusion that all persons interested believed those places to be safe for working. That was the finding of the jury?—Yes.

34679. And that the ventilation at the outlet, where we believe the explosion took place, was satisfactory: that was the finding of the jury?—Yes.

34680. Was it not your fear that this might be taken by colliery managers, colliery owners and workmen to be the normal state in which the ventilation might be, according to this finding?—That is so.

34681. Then I suppose your view on behalf of the men is this, that you should have a second inquiry, not only to ascertain the facts, but in order to show up any mistake that may have been made by the coroner or by the jury in the first inquiry.

(*Mr. Ratcliffe Ellis.*) Or the Home Office.

(*Chairman.*) Or the Home Office or anybody.

(*Mr. Wm. Abraham.*) But that is the object of this part of the law—that a different court should inquire.

(*Chairman.*) But the point, as I understand, is this: the position of the Home Office, as I understand it, is "We want to have all the facts out on which we think that an opinion ought to be based with regard to the safety of the working of a mine, but we do not consider it necessary to review the finding of a jury if all the facts are brought out; we set aside the finding of the jury altogether and we base our opinion upon the facts brought out before the coroner, and if the whole of those facts are brought out we do not consider that there is any necessity to have any further inquiry." That, I understand, is the Home Office view.

(*Mr. Cunynghame.*) I hope what I am going to say now will end this matter: I understand from Mr. Abraham, and I believe also Mr. Smillie, that no attack is made upon the Home Office as to their conduct taking this case. That is clear. They did the best they could under the circumstances, and they had not only the coroner's inquiry but they had a report from Mr. Evans and a report from Mr. Martin. (*To the Witness.*) I understand the position of the Federation is this—and you will explain whether you agree in this—that really what is wanted is greater and wider publicity than a report of this kind can give, and it would have been a good thing, as the Federation think, if Section

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45 had been put in force so as to give that greater publicity. If I may say so, on behalf of the Home Office, there is a great deal in that; we have not perhaps fully appreciated the wider publicity that would be given by means of an inquiry. So far, I am quite prepared to admit that, and I understand that is really the whole point between us. I should be prepared to join with anyone who would say that reports and inquiries under Section 45 are very desirable in the case of important accidents. Such inquiries have not usually been held before, and, although I do not think they would have added to our knowledge at all upon this particular case or in any of the others, yet, looking to the strong feeling and widespread feeling that there was on behalf of the miners, I think it would be judicious now and then to hold them in cases where there are very big explosions. That is the position which I should take up in considering the matter at the Home Office. As that question has been raised, I think it is better to make that statement at once; it may be a better method, as it seems to be, in some cases —I do not say in every case—than to turn a coroner's court into a sort of court of inquiry.

(*Chairman.*) I may perhaps mention that this letter from the Home Office, part of which I have read, goes on to say this, which I think meets some part of the objection you raise to the action of the Home Office in refusing an inquiry: "Mr. Akers-Douglas proposes, however, to take the occasion to consult Mr. Martin as to the possibility of any special action with regard to mines working the Rhas Las seam, and further to refer to the inspectors generally at their next meeting the question whether it is possible to propose any fixed rule as to the size of the 'cap' upon a lamp which should be considered indicative of danger, and to determine the moment when the withdrawal of workmen should be made compulsory.

(*Mr. Cunynghame.*) That was done.

(*Mr. Wm. Abraham.*) I find that one of the reasons which were given to us at the deputation is not stated there. One of the reasons was that the whole question was coming before this Commission; he had made up his mind that there was to be a Commission, and the whole of this question was coming up before it.

(*Mr. Cunynghame.*) I can say positively that that was one of the reasons for not holding an inquiry in this McLaren case.

34682. (*Mr. Smillie.*) Was the general opinion held that the fan was too small for the ventilation of those two large collieries?—Yes.

34683. Was it understood amongst the workmen that for six months there had been talk of a new fan and a larger fan being placed there?—Yes; and the management stated at the coroner's inquiry that the fan had been ordered six months before then.

34684. Was it the general opinion amongst the workmen that that fan was being kept back because of the expense?—No doubt that would be the impression of the workmen.

34685. That was your impression, I think, which was indicated at the time?—Yes.

34686. And that is one fact which could have been brought out, whether or not it was the case that the question of expense was keeping the larger fan from being erected there to ventilate those collieries?—Yes.

34687. (*Chairman.*) There are one or two general questions which I should like to put to you: I think you mentioned that something ought to be done towards widening the haulage roads in some cases, and that there ought in every case to be a gangway at the side of the haulage road which would be broad enough for a man to walk along in safety. Was that not one of your suggestions?—Yes. My expression was not "gangway" but "a pathway." *Mr. Evan Thomas.* 13 Dec., 1907

34688. A side-walk or pathway?—Yes—by the side of the rails.

34689. But did you not further suggest that that ought to be in some way screened off from the rails—that there ought to be something in the nature of a screen?—No; my suggestion was this, that a gangway would involve that and the haulers could not utilise that.

34690. But why should a gangway necessitate any separation between the gangway and the rails. Why should you not have a gangway wide enought without any separation at all, so that the haulier could jump off if there was any danger?—That would meet my views entirely.

34691. You suggest that there ought not to be a fence?—Yes.

34692. Some people suggest that there ought to be a fence between the rails and the sides; but I should have thought it would be better not to have a fence, because then the hauliers could jump off?—Yes.

34693. With regard to the two examinations, you say that in every shift there ought to be two examinations by the fireman in the course of a shift instead of one, which is now the law. Would you have two examinations in the case of a repairing shift, or would it not be sufficient in the case of a repairing shift to have one examination during the shift?—I think that if a three shift of firemen could be instituted that might be done easily, whether it was a repairing shift or a coal cutting shift.

34694. But would it be necessary to have two examinations during the course of the repairing shift? Of course in the working shift the face is constantly being brought further on and you may have a blower of gas, and all kinds of things may happen during the working; but in the case of a repairing shift probably very little would happen. Would it not be sufficient in the case of a repairing shift to have one examination during the shift?—So far as the faces are concerned, yes. There would be no necessity for examining the coal working faces during the repairing shift.

34695. But why should you have more than one examination of any kind during the repairing shift? There is so little that can go on to alter the state of the mine during the repairing shift that I should have thought one examination would be sufficient during that shift?—I think that would be the best opportunity for the fireman to examine the roads.

34696. That there might be two examinations, but that the second examination might be with a view really to finishing off the work which he perhaps hardly had time to do during the working shifts?—Yes. As I stated before, the first examination in the morning is more particularly confined to the faces, and under the longwall system, and especially the Barry system, they can travel along the faces without going out over the roads. Then during the repairing shift, when no work is carried on at the coal faces, it would be an opportunity for them to examine the roads more minutely.

34697. So that you think on the whole that it would be desirable that there should be two examinations held in the course of the repairing shift?—Yes, I think so.

MR. JAMES WINSTONE, called and examined.

34698. (*Mr. Wm. Abraham.*) You have been present all through Mr. Thomas's examination?—Yes. *Mr. J. Winstone.*

34699. Generally speaking, do you agree with his evidence?—With the exception that as to the McLaren affair I do not know anything of the details, and I had not the same experience of that case as Mr. Thomas.

34700. You understand we have had so much of this evidence that if we can shorten the inquiry we should like to do so?—Yes.

34701. Is there any point which you would like to emphasise in your evidence. Will you kindly tell us what you wish to say in addition to what Mr. Thomas has told us already?—I should like to emphasise the necessity of the colliery examiners or firemen testing the top as well as making the examination.

34702. That would mean that they would have a tool, either a mandril or a drill, or something of that kind to test the top?—That is so.

34703. We have had it called before "sounding the top"; that would be the same thing. By that method a miner would understand whether there is a danger lurking there which he cannot see?—Yes.

34704. Do you think that is of special importance?—I do.

34705. That again would mean that the examinations would be made leisurely so as to have more time if necessary?—Yes.

34706. I notice that you are not satisfied with the present mode of examinations?—That is so.

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Mr. J. Winstone.
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34707. Will you kindly suggest to us what improvement you think is necessary?—I think shorter hours for the examiners and more time: they should not be engaged in any other work but examination.

34708. With regard to improved haulage roads what do you suggest?—I should like to suggest, as Mr. Thomas has already suggested, that there should be a pathway alongside of the haulage road, and that the signal wires should be on the same side as the pathway, so that the rider may know and have an opportunity of getting out of the way of the trams, and into communication with the engine driver. They are now, I might say, generally speaking, put alongside the haulage road where the tail rope is running—the sheave wheels are there. I have had some little experience and have found great difficulty in getting at them.

34709. It is a source of danger and accident that the haulier should be walking or running, as he is sometimes, before the horse?—It is.

34710. And this pathway would do away with that source of danger?—Yes.

34711. That is your point with regard to it?—Yes. We have had one or two cases recently where workmen have been killed through the timber on the haulage road being so close to the rail that they have actually been knocked off the journeys.

34712–14. One instance of fact would be of more value to this Commission than half a dozen hearsays. You know that to be the case in your own district?—Yes.

34715. With regard to the examination of winding ropes have you anything to suggest there?—I think that to be an important matter, and I think they should be examined immediately before the men descend the shaft and immediately before they ascend the shaft. I can give you a reason if you desire it.

34716. If you please?—We had a very serious accident in 1902. There were eight men who lost their lives at one of the collieries in my district, and I have no hesitation in saying that had an examination been made it would have been prevented.

34717. This is a very natural question to ask: have you any reason to know if an examination had been made in that case that that accident would have been prevented?—By inference.

34718. Very well: tell us what the case was?—The case was this. The men were ascending after the completion of their shift, and a piece of wood on top of what was acting as a framing on the upcast shaft, the wires in the rope caught in that piece of wood and carried it into the sheave wheel, threw the rope off the sheave wheel, and the men were sent down the pit, eight of them.

34719. (*Chairman.*) The rope was quite good. An examination of the rope would not have prevented that accident?—My experience leads me to believe in this case that there were certain wires in the rope broken, and they caught in the piece of wood.

34720. (*Mr. Wm. Abraham.*) Was there an inquiry?—No.

34721. (*Mr. Ratcliffe Ellis.*) There was a coroner's inquest?—Yes.

34722. Did that come out there?—Not as clear as we should have liked it to come out. It was very difficult to bring it out, because the rope was badly damaged.

34723. Where was it?—We should like to refer to the inspector's report on the subject?—It was in October, 1902, and was at Tirpentwys Colliery, near Pontypool.

34724. (*Mr. Wm. Abraham.*) You agree with Mr. Thomas with regard to systematic timbering?—Yes.

34725. You think that is desirable?—Yes.

34726. And it would be effective, in your opinion, to reduce accidents on roads, and so forth?—Yes.

34727. Have you any special evidence you would like to give upon that point?—Yes, we have one or two cases.

34728. I think they will be important.—We have a case where a man was killed a very short time after the fireman had passed through. He had made an examination and stated the top was all right, but a very short time after the top came down and killed the man.

34729. You said "a very short time": about what length of time was it after the fireman passed that way?—The fireman passed there five minutes before.

34730. He saw no danger?—No.

34731 To what do you attribute that state of things?—A sudden squeeze may bring it on.

34732. The examiner did not see that anything was wrong. You think that he had no time, that he was pressing on?—Yes: there was not a satisfactory testing of the top.

34733. Do you think that systematic timbering in cases like those would have prevented such accidents?—Certainly.

34734. How far apart was the timbering in that particular place?—In width about 7 or 8 ft., but there was no timber for a goodish length, because the top was supposed to be very safe there: it was a strong top.

34735. In common with your colleagues you hold the opinion that where the top is apparently safe and good a great number of accidents happen?—I think so.

34736. It would reduce them considerably were timbering placed at stated intervals?—Yes.

34737. Have you anything more to say on coroners' inquests?—I think that we ought to have a right to be represented there.

34738. Will you just explain what you mean?—The men are allowed to be represented there at the present time, but it seems to me that we are on sufferance. We are there at the will and the dictation of the coroner. I think we ought to be allowed to be there.

34739. You think that the workmen or the workmen's representatives ought to be there as of right, by law?—That is so.

34740. And they ought to be allowed to put questions that are material to the inquiry?—Yes.

34741. Without having to ask the permission of the coroner?—Yes, and without having to feel that we are there on sufferance.

34742. Is there anything more you would like to say? Will you deal with shot-firing?—I agree *in toto* with Mr. Thomas as to shot-firing, that one man should have charge of the shot-firing: he should charge and fire the holes and the company should supply the explosives free of charge.

34743. With regard to "free of charge," let that bide. You think that there should be another system, that the explosive and the detonator should be under the care of an official entirely?—Yes.

34744. And until the moment it is wanted to be used?—Yes.

34745. That the official and the man should be there together when the hole is rammed?—Yes, and the man in charge should connect the wire.

(*Mr. Ratcliffe Ellis.*) Are you familiar with the Explosives Order, which requires that until about to be used the explosive and the detonator are to be kept in a securely locked case?

34746. (*Mr. Wm. Abraham.*) You were here, I think, when that point was raised. Are you cognisant of the fact that it is a breach of the Explosives Order that the explosive and the detonator should be in the hands of the miner at the same time?—Yes, but I fancy——

34747. (*Mr. Ratcliffe Ellis.*) Not the miner at all.—In the hands of the shot-firer—should not be given to the miner. I am afraid there may be some misunderstanding. I think the words are "about to be used."

34748. (*Mr. Wm. Abraham.*) And because about to be used, then the workman may have had the detonator in his charge 10 or 15 minutes, or half-an-hour?—That is so. I am afraid there is a misunderstanding about those words "about to be used."

34749. "Detonators shall be under the control of the owner, agent, or manager of the mine, or some person or persons specially appointed in writing by the owner, agent, or manager for the purpose, and shall be issued only to shot-firers or other persons specially authorised by the agent, owner, or manager, in writing. Shot-firers and other authorised persons shall keep all detonators issued to them until about to be used." The practice is that the men have both in their charge for some time?—Yes, that is so.

34750. What would really meet your requirements would be the enforcement of that Order?—Yes: but I should like to add——

34751. With the alteration of "about"?—I think it is not unfair to say in some instances the men are given the explosives in the morning, and that is hours before they have to use them.

34752. (*Mr. Ratcliffe Ellis.*) But not the detonator?—No.

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34753. That is the point. I am not a miner, but there is no harm in the man having the explosive if he has not the detonator ?—I would not like to say that. I think it would be better if the explosive was under the supervision of a responsible person—a competent person. I think that they are not able to ram the hole, or stem it before they have the detonator.

(*Mr. Smillie.*) A detonator must be attached.

(*Mr. Ratcliffe Ellis.*) What length of time has the collier possession of the detonator ?

34754. (*Mr. Smillie.*) This may be widely interpreted to give them one hour or two hours.—Yes. A shot-firer may pass through the face, and, it may be, take one or two hours to go his round. He will give one man a detonator and go his round, and come back in two hours' time.

34755. (*Mr. Wm. Abraham.*) To meet your case even this Order will want to be altered ?—Yes.

34756. With regard to the word "about."——I am afraid there is too wide an interpretation put on the words "about to be used."

34757. Is there anything else upon that point you wish to say ?—Nothing else.

34758. Is there anything else in the evidence given yesterday and to-day you would like to speak about ?—Nothing.

34759. (*Sir Lindsay Wood.*) You said it would be better that the examiner should have shorter hours ?—Yes.

34760. What hours have they now ?—In some instances 10, 11, 12 and 13.

34761. The men who go in to examine the places for the safety of the men ?—Yes.

34762. (*Chairman.*) Would a man have 13 hours as a general rule, or would that only be once a week, or once a fortnight ?—He has 13 hours as a general rule in many collieries.

34763. The firemen have 13 hours as a general rule ?—Yes.

34764. (*Sir Lindsay Wood.*) You said you thought it would be better to have a travelling way on one side of the haulage roads ?—Yes.

34765. You have not that now ?—No.

34766. The men walk in the middle of the road ?—Yes.

34767. There is no space between the rail and the side of the road for them to travel ?—There is not sufficient space.

34768. What do you call sufficient ?—4 to 5 ft., I think, from the rail.

34769. What width would that make the whole place ?—It might make it 9 or 10 ft.

34770. Would that be excessive for the safety of the roof ?—I think not.

34771. About 10 ft. ?—Yes.

34772. Depending upon the state of the roof ?—In many instances.

34773. In some cases it would be rather dangerous even if the timber was close ?—No, I think it could easily be made 9 ft. at the top and 10, 12 or 13 ft. at the bottom.

34774. (*Mr. Wm. Abraham.*) Have you the same opinion as Mr. Thomas with regard to the return airway being used as a place for workmen to come out ?—It would be a great advantage in more ways than one.

34775 It would create no unpleasantness for the men ?—I think not.

34776. Rather otherwise ?—I think so.

34777. It would increase the ventilation as well ?—It ought to.

34778. It would improve the ventilation ?—Yes.

34779. You are of the same opinion distinctly on that point as Mr. Thomas was ?—Yes.

34780. (*Chairman.*) That is to say, if the return airways were used for men to travel along, it would be impossible that the air could be as foul as it is sometimes in the return airways. When you speak about increased ventilation you mean it would be unpleasant for the men to go through the airways as they are now sometimes, and it would lead to better ventilation of the mine ?—Yes, it would lead to better ventilation of the mine.

34781. (*Mr. Ratcliffe Ellis.*) You only suggest that where there is not a separate travelling road or accommodation for travelling alongside the haulage free from the motion——?—The other would suit me.

34782. A separate travelling road is the best of all ?—It all depends.

34783. But what is the disadvantage of a separate travelling road ?—There is no particular disadvantage. I should think it would be an advantage.

34784. I suggest in a new colliery if you can manage it a separate travelling road might be the best of all ?—For that particular purpose.

34785. If you cannot get that you would like to have room to travel safely along the haulage road. People would like to pass in and out there ?—I beg your pardon.

34786. If you cannot have a separate travelling road you want room on the side of the motion so that people may travel safely ?—Yes, on the engine plane. Not only that they may travel safely backwards and forwards, but that the rider——

34787. Where you have the return airways made big enough for the men to travel do you still want this accommodation on the haulage road for the persons who are working the haulage ?—Yes. I have had two instances recently where men were killed.

34788. Even supposing the return airways were big enough for men to travel in, you still want them to be able to travel along the haulage roads without being in danger of being damaged by the passing machinery ?—Yes.

34789. With reference to this winding rope you know that the winding rope and the guides have to be examined once at least in every 24 hours ?—Yes.

34790. When in the collieries in your district, does the examination take place now ?—Generally in the morning.

34791. What time in the morning ?—Perhaps between four and six o'clock.

34792. That is before the men go down ?—Yes.

34793. That is all you want so far as that is concerned ?—Well, yes.

34794. This accident you refer to was when the men were coming out ?—Yes.

34795. Do you want another examination before the men go down, or is the examination in the morning sufficient for the day ?—I want another examination.

34796. You want, instead of it being provided in the Act of Parliament to be examined once in every 24 hours, for it to be twice in every 24 hours ?—Yes.

34797 Supposing two or three shifts are working, do you want an examination before every time they are used for lowering or raising men ?—I think that could be obviated, because if they examined the ropes prior to the men ascending the shaft that would also suit for the men to descend the shaft on the night shift. One shift comes up and the other goes down practically at the same time.

34798. At the collieries you are acquainted with do they have an interval of any sort during the time of work for a meal, 20 minutes or half an hour from the time they begin to work up to the time the men come out of the pit ?—No.

34799. There is no stoppage ?—No.

34800. (*Mr. F. L. Davis.*) You mean no stoppage at any particular time for all the men ?—There is no stoppage of winding.

34801. (*Mr. Ratcliffe Ellis.*) Is there any stoppage of winding ?—No.

34802. Do you know that there are many places where, during the stoppage from the winding, the examination is made of the ropes and the guides ?—I think that is so.

34803. You think that it is necessary for safety that this examination should be immediately before the men go down, and immediately before the men come up ?—Of course they have been winding coal the greater part of the day—the whole of the day—and naturally the ropes are affected thereby.

34804. What would you expect to find by an examination ? What sort of defect would there be ?—I should expect to find the wires broken in some instances and probably the strands in some instances. We should expect to find the rope partially pulled out of the clasp.

34805. Do you think there would be a change between the condition of things shown in the morning and the afternoon when you examined it eight or nine hours afterwards ?—Yes.

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Mr. J. Winstone.

13 Dec., 1907

34806. In the inspector's report on the Tirpentwys accident the inspector says, "The rope which broke had been in use two years and four months and although it showed wear on the outer wires there do not appear to have been any broken wires observable." Your suggestion was that a broken wire caused this trouble?—Yes.

34807. Then he goes on to say: "Directly after the accident a length of the rope, taken as near the place of breakage as possible, was sent to Lloyds Bute proving house at Cardiff, where the breaking strain was found to be 36½ tons, while as a result of testing each wire separately the aggregate breaking strain was found to be 37½ tons. The rope when cut showed the inside wires to be in good condition, bright and clean, without indications of rusting or decay. It was, in fact, in a thoroughly satisfactory condition, having a safety factor of nine times with the working load and of eighteen times with men, which seems very ample under ordinary conditions at the expiration of 2½ years work, and approaching the time limit or use for this purpose." That is the inspector's report as to this rope. You still think a broken wire caused the mischief?—Yes.

34808. If it was a broken wire an examination by passing it through the man's hand would discover it?—Yes.

34809. That is the way the ropes are examined, by the rope being passed through a man's hand?—I think in some instances they have a tong, an iron implement for the purpose.

34810. While on the question of ropes have you any suggestion to make beyond that they should be examined not merely before the men descend but before they come up?—Have you any other suggestions making for safety?—Not so far as the rope is concerned, but I think the bridle chains should be annealed every now and then and examined, passed through a fire for the purpose of examination.

34811. You mean where the rope is attached to the cage?—The bridle chain, we call them. There are four or six chains on each carriage.

34812. That is where the rope is attached?—Yes, attached to the bridle chain.

34813. Those chains are examined from time to time?—Yes.

34814. You think they are not examined sufficiently frequently?—Yes.

34815. You have no suggestion to make beyond that?—No.

(*Mr. Wm. Abraham.*) He said yesterday they should be annealed.

34816. (*Mr. Ratcliffe Ellis.*) Passed through the fire. I gather from you the general condition provided in General Rule 5 that there must be this examination and that they must be kept in good order, is not in sufficient detail to satisfy you. You think it ought to be more in detail as to what is to be done with the winding rope and the annealing of these chains?—Yes.

34817. Is there anything else you would suggest?—Yes. I do not want to reflect in any way upon the management of this particular colliery where this accident occurred, because I think it is one of the best ordered collieries in the coalfield.

34818. Do you want to make any suggestion with reference to this winding rope or the appliances for raising and lowering men beyond what is required now. Have you any other suggestions to make with regard to anything which is not provided for now?—No, except the examination of the guide ropes.

34819. Going back for a moment to this inspector's report, he says: "The indications clearly prove that the rope was thrown off the pulley by a piece of timber having been carried up by the rope, and it is evident that there was no other wood except the 14 inch (so-called floating) board which could have got there. In what manner it was carried up, whether by a broken wire or by its having been suspended by the rope through its swaying or vibration and floated up in that way, as may be demonstrated by a stick and a ring, or by its having been canted and been thus drawn up, will never be known, but either of the three would account for it, as the distance is only 12 feet to where it would catch." That is what you found your view on, that it might be a broken wire?—I had an opportunity of going to examine; they gave us every facility, and that was my opinion. I have had a good deal of experience of pit ropes and engine plane ropes.

34820. You heard the evidence I put to the last witness upon the various matters affecting the special rules and inspection. Do you adopt his answers to my questions?—Yes.

34821. (*Mr. Smillie.*) The inspector in that report says no broken wires were apparent, but the outside wire seemed to be worn. I suppose he means were apparent when the examination was made in the morning, because you say the rope was badly damaged after the accident?—Yes; very badly damaged.

34822. He has in his mind, I suppose, "apparent" previous to the accident?—I really think it is after the accident.

34823. There were many broken wires after the accident.?—Yes. For yards and yards the rope was curled up and broken off.

34824. Do the provisions of the Coal Mines Act with regard to the employment of boys on the surface provide an interval of at least half an hour for meals? Is that carried out at your mines where the winding continues for eight hours?—I am afraid not.

34825. You could not give a definite opinion as to whether it is carried out at all your mines in your district?—From observation I think it is not carried out.

34826. If it is carried out, then the lads under 16, and women, if there were any employed, would require, even while the winding was going on, to get half an hour for meals?—Yes.

34827. There are no women employed on the surface in your mines?—Yes, at two of them.

34828. Are they employed more than eight hours in 24?—Yes.

34829. More than eight hours continuously?—Yes.

34830. Do you know whether or not they have one-and-a-half hours off if employed ten hours?—No, I think not.

34831. You know that the Act provides that they should have that?—Yes.

34832. You are aware that the Act does not provide for any interval for lads who may be employed underground and where there is eight hours continuous winding. Is it possible that the lads may work the whole of those eight hours without an interval?—Yes, it is possible, but I think they do arrange to have a bit of food; but still there is no stipulated time.

34833. You have to arrange it in the wrong way. There is no statutory provision made for them to have an interval?—No.

34834. Do you not think it would be as well that there should be an interval provided for?—I think so.

34835. What is your view of the position of a colliery fireman? Is it a position of importance?—Very.

34836. Of considerable importance?—Yes, it is one of the most important positions in the mining industry.

34837. Is it your opinion that so far as the safety of the men is concerned that position is more important even than the manager's?—I should say so.

34838. I suppose you have no fault to find in a general way with the men who act at present as firemen: I mean with their qualifications in a general way. I suppose generally they are very efficient and competent men?—Generally speaking.

34839. But there is a feeling that sometimes men may be appointed who are not thoroughly competent?—Yes.

34840. Is that your own feeling?—Yes.

34841. Do you think it would be wise to have provisions made that they should hold a certificate of competency to prove, so far as a certificate could, at least, that they were competent for that work?—I think that would be useful, but I should lay emphasis upon their practical knowledge.

34842. I was going to lead up to that. Thorough practical knowledge of underground working would be one of the qualifications necessary in order to secure that certificate of competency?—Yes.

34843. There is, as you are aware, nothing at the present time to prove whether or not a person is a competent person. The Coal Mines Act provides that the manager must appoint a competent person?—Yes.

34844. But he has nothing to guide him but his own knowledge or a statement made by a person to him?—That is so—his own observation, of course.

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34845. You think it would be wise if there was an examination and a certificate of competency ?—Yes.

34846. One of the qualifications necessary to gain that being practical knowledge ?—Certainly.

34847. Would the same thing apply to the competent person who at present employs a shot-firer ?—Yes.

34848. You are aware that a manager may appoint a person to be a shot-firer and handle explosives who had really no previous knowledge ?—Yes; I have had experience of that.

34849. He might appoint a person who had been receiving compensation in order to give him what is called a light job as a shot-firer, to handle explosives. There is nothing to prevent that, so far as you know ?—No.

34850. You do not know any cases of that kind which have occurred in your own district ?—No.

34851. It would be wise to make sure that a person is a competent person to handle explosives, and that could only be proved by his holding a certificate of competency ?—Undoubtedly.

34852. I suppose you are also in favour of engine-winders holding certificates of competency ?—Yes.

34853. The same thing applies to them at the present time. They may be appointed either through favour or for some other reason, and may not be as competent as we would like them to be, holding, as they do, the lives of the men in their hands ?—Yes, I agree.

34854. (*Mr. F. L. Davis.*) When is shot-firing in the roads done in your district generally ?—Where they are not allowed to fire in the coal, or where it is unnecessary they should fire in the coal, it is, generally speaking, done between the shifts.

34855. Practically that is universal ?—I am not able to say it is universal in my district.

34856. In your district it is practically always done. You have hardly ever known it done during the shift ?—That is all.

34857. Are there any places in your district where they fire shots in the coal ?—Yes, there are some.

34858. What proportion would that be; places where it is done ?—I should think perhaps one-third.

34859. As much as one-third ?—About one-third.

34860. When they fire shots they fire during the shift ?—Yes.

34861. Do they fire shots in your district in the coal more than other districts, so far as you know ?—I think they do, as far as Monmouthshire is concerned.

34862. I do not know whether I am right, but it is really in your district that is done. It is practically the only place in South Wales where firing in the coal is done to any extent ?—I think it is done more so in the western districts—the anthracite districts.

34863. The western district and that portion of Monmouthshire where you come from are really the only places where firing is done to any extent in South Wales ?—As far as I know, to any extent.

34864. (*Chairman.*) Is there anything you would like to add now ?—Nothing else.

MR. WILLIAM HARRIS, called and examined.

34865. (*Mr. Wm. Abraham.*) You are in favour of reducing the size of the districts of the inspectors ?—Yes.

34866. Have you any special reason in your mind for that opinion ?—Yes. The reason I suggest that the size of the districts should be reduced is because under the present system of inspection there is not what I may call a proper system of inspection being made. It is very rarely we see an inspector at our collieries, and when they come it is about one district they take in the colliery as a sample of the whole colliery, which, in my opinion, is not an efficient way of inspecting.

34867. You disapprove of inspection by samples ?—Yes.

34868. With regard to inspection under Rule 38, what do you want to suggest ?—My experience is that there is not really full advantage being taken for various reasons of inspection under Rule 38.

34869. The workmen do not take advantage ?—The workmen do not take advantage, and in fact I find that there is fear on the part of some workmen that if they make a proper examination they will be punished if their report is sent in. I have a case in mind where the examiner examining under Rule 38 condemned a whole return because of the size of it. It had squeezed to such an extent that as far as the return was concerned it was not in a proper condition; pieces were in good condition, but the return was measured by the size of the smallest part of it. The result was this man was called upon to apologise by the manager because he had condemned the whole of the return.

34870. Your opinion that there is that kind of fear among the men is based upon certain facts you know of ?—Certainly.

34871. Have you found in late years any difficulty in getting what we call the best of our men to make the examination, and men that ought to be the proper men ?—Yes. There is no doubt since the passing of the Workmen's Compensation Act—I am expressing my own personal opinion in this matter—that there is a difficulty for the older men to obtain employment. Those older workmen hesitate to accept positions of responsibility that would bring them in conflict with the management, and it is the older men who are the most experienced examiners, especially on behalf of the workmen.

34872. There is a certain number of young, strong men who are able and practical men ?—Yes.

34873. Do you find that there is a difficulty to get those men to make these examinations ?—There is a difficulty from the cause I stated with regard to that other instance—the fear of having to suffer in some form or other.

34874-5. With regard to inspection by officials, what suggestions have you to make ? You are in favour of the examiners having a certificate ?—Yes.

34876. As a proof of their being qualified for the position ?—Yes.

34877. Have you reason to believe that there are here and there some men appointed to official positions that are not qualified ?—Yes, there are instances which have come under my notice very recently; in fact, there has been an agitation in one instance I know.

34878. Would you have any objection to naming that place ?—I have not the least objection. It is the colliery at which I am employed myself at the present time. It is Messrs. John Lancaster & Co., where a man came to the colliery from the tin-forge who had never worked on the coal-face. He came as a labourer, and he became a timberer's labourer, and then he became a timberman, and from that he came to be fireman, and now he is overman, and he has never worked a day on the coal in his life. For a man to be an important official in a colliery I think he ought to have some knowledge of working in the coal face.

34879. He may be an exceptionally clever and able man ?—Yes, but there are exceptionally clever and able men there at the present time. We have two men on the staff who are holding their second-class certificates. One of them has had his certificate for the last 15 years and has had considerable experience in steam coal collieries in Glamorganshire as well as Monmouthshire. Although holding the certificate and having had considerable experience, he is overlooked in favour of a man who came seven years ago from the tin forge.

34880. How long has he been underground ?—A matter of about seven years from the commencement to the end, up to now, from the time he started first of all as an ordinary labourer.

34881. Until he became an overman ?—Yes.

34882. Then you say with regard to the districts it is desirable that they should be made smaller ?—It is desirable that they should be made smaller, and that other duties should be taken away which the officials now have to perform.

34883. You agree with that view ?—Yes.

34884. With regard to discipline, as between fining and prosecution, which, in your opinion, is the more effective as a deterrent of negligence ?—Of course, I would differ with regard to certain cases. There are cases in which I conceive that there would be certain individuals who, through entire inadvertence, may commit a breach. They are tidy,

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respectable men who have been in the neighbourhood 40 or 50 years, and the very thought of being taken to a Police Court hurts them so much, apart from the fact of a fine being put on. In cases of that kind I should try to arrange without prosecution, but in ordinary cases of gross negligence I should say prosecution. In no case would I give the power entirely into the hands of the manager of determining whether there should be a fine or a prosecution.

34885. You are in favour of allowing fining in certain cases?—Yes.

34886. Supposing you have a case of a man tampering with his lamp?—Prosecution, at once.

34887. Supposing you had a man found with matches in his pocket?—Prosecution.

34888. What are the cases that you favour fining instead of prosecution?—In the case of a man who had matches, for instance, by accident. We will say a man does not smoke, and it is known that he does not smoke, but by some inadvertence he may be wearing a waistcoat in the garden in his spare time and have taken a match to burn some garden refuse. We know cases of a man who through accident has left matches in his pocket. In that case I should certainly say not prosecution, but only where you have clear evidence that there would be no deliberate attempt on the part of the individual.

34889. In that case you think prosecuting a man would be too extreme a punishment?—I think in a case of that kind it would be an extreme punishment.

34890. You do not agree that magistrates should fine the men when you have reason to believe that the offence is not purposely committed?—I would not say that they should be let off free. What I find is this, that the very fact of taking these men before the magistrates is the biggest punishment you can inflict—much greater than the fine imposed.

34891. Hence, taking a man before the magistrates for any offence, large or small, is more likely to stop him committing breaches of the rules?—Undoubtedly.

34892. With regard to timbering, are you in favour of systematic timbering?—I certainly am.

34893. Had you a complaint of a similar character to the one mentioned by Mr. Thomas, that men are not allowed to use their discretion to put up timber in certain places when they think it is necessary?—Yes, I am afraid that the practice is getting rather too common. Where timbering has to be paid for, then you have to have the permission of an official, but where timbering has not to be paid for you are given full discretion.

34894. (*Chairman.*) It is not a case of wishing to save the timber itself?—It is a question of saving the payment for timbering.

34895. Where there is no payment for putting it up he can always get sufficient timber?—There is no question arising of that kind in my experience.

34896. We were told that even where that was the case managers were very chary in providing enough timber?—I have not had an experience of that kind.

34897. (*Mr. Wm. Abraham.*) Supposing that the man had to put up a pair of timber or a road-post, or a cog, without the permission of the manager, is there no greater evil in consequence than that he would not be paid?—That is the evil, and that is what is being used with a view of entirely preventing the use of timber—what they call an indiscriminate use of timber—and wherever there is a question of payment they refuse to pay for them.

34898. Supposing a man had put up a road-post where he had been ordered to do so: do you know of cases where they have been knocked out?—I know of cases where timber has been knocked out. Certainly I do.

34899. That is not a question of payment, it is a question of using timber?—Yes, I certainly know cases. The only cases I know where timber has been knocked out have been where the question of payment has come in.

(*Mr. Ratcliffe Ellis.*) It is knocked out because they are not going to pay for it.

(*Mr. Wm. Abraham.*) The official knocks it out.

(*Mr. Ratcliffe Ellis.*) It is knocked out to show it is not necessary.

34900. (*Chairman.*) That is the evidence given before by the witnesses. They say that there is a dispute as to the payment for the timber and the official says it is not necessary and proves that by knocking it out?—Yes, and I would like to go further and say that in consequence of having timber knocked out I have known falls which have stopped the place for several days.

34901. (*Chairman.*) Can a man be had up for breach of rules if he puts up timber the management considers unnecessary. Do they knock out the timber and refuse to pay for it, or have him up for a breach of the rules?—They knock the timber out and refuse to pay him.

34902. That is all. He does not get had up for a breach of rule?—No.

34903. (*Mr. Smillie.*) You do not know of timber being knocked out except where a manager had to pay a workman?—I have only known it in cases where payment has been in question.

34904. (*Mr. Wm. Abraham.*) The man's discretion is good enough where there is no payment, but if this must be the view, he has no discretion when there is a question of payment?—That is what I object to. If a man has discretion to use timber for his own safety where there is no question of payment a man ought to have the same right where a question of payment does come in.

34905. By law he is compelled to place timber on the face at stipulated distances?—Yes.

34906. Whether it is necessary or not?—Within eight feet in the seam in the working, whether wanted or not, you must have a stick.

34907. And that for the purpose of safety?—Yes, of course that eight feet applies to the whole line of face, as well.

34908. The reason for that is it is, thought necessary for safety?—Yes.

34909. The application of the same rule to the roads, in your opinion, is a question of safety also?—Certainly, on the roadways I am certain they are required very much closer than eight feet.

34910. In the face where there is no payment for timber the man is allowed to put in an extra prop or an extra sprag if he thinks it is necessary?—Certainly.

34911. But in a road where he thinks there is equal danger he is not allowed to have that discretion?—He has to draw the attention of the fireman, and if he gives permission he can put it up, but if not, he is not allowed to.

34912. You know of cases where a man has exercised his discretion and put up timber and that timber has been knocked out by the official, and a fall has taken place?—I have a case in my mind where a fall took place and it was two days before it was cleared.

34913. Where?—At a colliery in the Western Valleys.

34914. What was the case?—It was a case of timber being put up in the stall road and the official came round and said: "Who ordered you to put this flat here?" The man said: "The top is bad." The official said: "You will not get paid for it. I do not think it is wanted there." The man said: "Will you give permission to take it out," and he did. The man took it out and down came the top. They were two days clearing the fall.

34915. You are also of the same opinion as other witnesses with regard to the roads being made large enough for men to walk by the side of them?—Yes.

34916. To obviate the necessity of hauliers walking before the journeys?—Yes.

34917. Are you of opinion also that the return airways should be made travelling roads and kept large enough for a horse and tram?—Yes, I am of the same opinion.

34918-21. Putting all the things together, those improvements, in your opinion, would reduce the causes of accidents and the number of accidents?—Those would very considerably reduce the causes of accidents, in my opinion.

34922. With regard to inexperienced men, have you something to recommend there?—I think greater care should be taken, especially in the periods of what is known in the coal trade as periods of boom, where possibly a large number of the older collieries may be freshly developed. I think there is too much indiscrimination in taking men on from the farms and anywhere else. They are put on indiscriminately, and in the worst paid collieries you find that there is a large percentage of what you might term unskilled labour being introduced. The better paid collieries generally succeed in getting the better class workmen, but in the lower rated collieries you find th se men coming in from the agricultural districts, and ultimately when the period of depression comes on they are

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serious competitors. That is not so much the point, it is the question of the serious danger which comes through these men being placed in dry and fiery mines.

34923. You suggest some improvement in testing lamps?—Yes, that to my mind is a point that is very serious. I had an experience, and I should like to let the Commission know the experience I got some three years ago. In the colliery I am engaged at we struck a large fault which was giving off a great quantity of gas. The result was the air became so charged with gas that one or two districts were stopped. I, in conjunction with some others, was appointed to act as examiner. We were using then as a collier's lamp a lamp which burnt a kind of spirit oil called colza oil, and the remarkable thing was that the collier's lamp detected the gas quicker than the fireman's testing lamp did. I made an examination on two or three occasions. I took my ordinary working lamp with me and I also took the ordinary testing lamp as used by the fireman at the colliery, and whereas I would get one-eighth of an inch of cap on the ordinary fireman's testing lamp I would find half-an-inch on the ordinary working lamp. I would also find a cap on the ordinary working lamp when I would not find a trace on the fireman's testing lamp.

34924. That would not be your experience very largely. That is not common?—No, but the point I wish to emphasise is this—if it is possible to get one lamp to be used in a colliery sufficiently sensitive to show the presence of gas in the way the lamp burning colza oil did, I think such a lamp ought to be introduced, so that the examiners should obtain that lamp and have a more sensitive lamp than they have now. That is the point I wish to make. I may say in connection with this matter as well that we had a difficulty with regard to the cap of gas. The point was referred to the Home Office at that time, and I mention this so that Mr. Cunynghame may hear it. I think Sir Neve Foster was adviser of that Department at that time. The point was forwarded as to when a cap of gas became dangerous. We held, and so did Mr. Martin, the inspector, that the cap of gas shown in that particular part of the working was such as to render it unfit for the workman to work in. The manager, on the other hand, held that the cap of gas was not dangerous. The result was we took it to our agent, Mr. Brace, who forwarded it, with a view to having a decision as to when a cap of gas was dangerous or to what extent. That point was raised at Abertysswg and is still left undecided.

34925. (*Mr. Wm. Abraham.*) You are of opinion also that the ropes and winding gear should be examined oftener than they are?—Putting it briefly, I should put it in the same way as Mr. Winstone. I agree with his evidence upon that point.

34926. With regard to the second inquiry, are you in favour of that?—Yes, I am in favour of that, because the first inquiry, or the coroner's inquiry is merely an inquiry appointed to inquire into the cause of death, and in the course of the evidence highly technical points may arise upon which the case may turn, and as the jury is only empannelled to ascertain the cause of death, the jury often are not of such a class of men as to be able to arrive at a conclusion upon any conflict of evidence there may be, as between the parties at the coroner's inquiry. For instance, sometimes you have cobblers, shopkeepers, and different classes of people at a coroner's inquiry, and if a highly technical point is raised, such as was raised at Abertysswg, I think it should not be left to a body of men of that sort to decide.

34927-29. (*Mr. Cunynghame.*) When you said in one case a man was taken on as a timber man's labourer, and then became a timberman, and then a fireman, I think you told us before a man became a fireman you desired that he should work at the face?—Certainly.

34930. May it not be that men who would make good firemen are not so physically strong as working at the face. Would you not give them a chance? Could a man become a good fireman who was not in possession of the strength required at the face?—I am afraid too many firemen have been made because they are not physically strong I think that a man who takes on such an important position as that of a fireman does not require to be a man suffering from ill-health. It requires the best of the men.

34931. I do not mean ill-health, but not such physical health as would be required. You can imagine a small man has not such physical strength. You know more of mining than I do, but I should have thought a man might make a good fireman who was not a particularly good man at the face?—You find small men who are particularly good at the face.

34932. There is nothing in the duties of a firemen that renders it imperative that a man should be a good hand at holing coal?—No; it is necessary he should have had experience of the roof of the working place.

34933. It is perhaps from a feeling of fairness of employment that you were putting that?—No. If I was a manager I would not appoint a man unless he had had experience of working in the coal face.

34934. With regard to fines, I understand your chief objection is you do not like the manager being the sole determining man in the case?—I have a strong objection to that.

34935. The difficulty I see and which I should like your opinion upon is this: if you had nothing but prosecution you would either have considerable laxity, or you might find a very large number of men being prosecuted and losing a day's work by going before the magistrates. What have you to say to that?—In the exceptions I have mentioned I say the representative of the working men with the manager should deal with the case, subject to the approval of the mines inspector.

34936. You would not object to fines so much in a case where the man admitted he was wrong if there was some authority which arranged the fine, independent of the manager. Is that the point?—In those particular instances I have mentioned, that is so.

34937. With regard to the discretion of the men in setting up timber you want more timber set up in certain cases than is set at present?—We think it is not fair nor right, nor does it conduce to safety that men should be prevented from putting up timber where their own judgment says it is necessary.

34938. Would it not be too much to claim that men should be allowed to put up timber and pay for it, without any appeal to a third party to say whether it was reasonable? If you had no limited power to putting up timber, and the men paid for it, is it not open to the remark that men might go on being paid and put up an unnecessary quantity of timber?—My experience is not in that direction, and I have been working underground for some years. You may have individual cases where men would rush to do the kind of thing you mention, but my experience has taught me at any rate that when complaint of that kind is being made, that the workmen take due regard to that complaint, I mean when the management complain and say it is used indiscrimately and unnecessarily.

34939. You are not suggesting for a moment the putting up of unnecessary quantities of timber, or anything that would lead to that?—Certainly not.

34940. (*Sir Lindsay Wood.*) You said you found men in your district objected to make the examinations under Rule 38 on account of the fear of being marked men?—Yes.

34941. You gave an instance of one who had reported the return airway being inefficient?—Yes.

34942. You used the words "He had been brought before the managers to apologise?"—Yes.

34943. I did not know what that meant.—It meant that the management took exception to that part of the report in which he said such and such a return was in a very bad condition. The manager pointed out that there were only about 16 or 17 to 20 yards which were in the bad condition he had named. I say the man was justified in making the report, inasmuch as the whole of the return, or the capacity of the return, was judged by the size of the smallest portion of it.

34944. That is a matter of science?—No, it is a matter of fact.

34945. You mean the apology was rather to explain the reason why he had made the report.—Certainly: he claimed to have that report altered.

34946. He asked him to alter his report?—He said he would insist upon his altering his report. He insisted he should do so.

34947. If it remained on the report he could not alter it?—The books were produced.

34948. Do I understand you to mean that he is brought before the manager to explain the reasons of his report?—The manager took exception to his report. I might explain the manager took exception to his report and demanded that part of the report should be altered.

34949. There was a difference of opinion between the two?—It does not tend to give confidence to the workmen to go round making a proper examination according to their judgment, when the manager demands an apology for making reports.

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34950. Is it your opinion than 10 or 12 yards of the return airway being narrower than the remaining part would seriously affect the remaining length, a mile or more long —I do not know how many miles it was ?—It was not a question of miles.

34951. What was the distance ?—500 or 600 yards, possibly.

34952. Was the whole of the return airway only 700 yards ?—500 or 600 yards, and about 15 or 20 yards were very narrow. I do not say the whole of the other portion was strictly right: there were certain portions that were good, but the other portion was so very poor that the capacity of the whole return was only to be measured by the size of the smallest part of it.

34953. What was done to the man; was he discharged ?—No; but he has not undertaken an examination since, I think.

34954. What did the owners do to him ?—Of course they had exactly what they wanted. They brought the necessary pressure to bear, and they had the alteration of the report, and the man has not made an examination since, I think.

34955. Surely the owners have the right to ask the man to explain his report ?—When you demand an apology it does not tend to give men confidence in making an examination on a second occasion, nor does it tend to have truthful reports so far as other examinations are concerned.

34956. (*Mr. Wm. Abraham.*) Let us understand this for the benefit of all. Did the man alter his report ?—Yes.

34957. He did that because the manager demanded it ?—Yes.

34958. (*Mr. Ratcliffe Ellis.*) I suggest he altered the report because it was wrong, not because the manager requested him ?—I should say that the man was intimidated into that position.

34959. Now you said that the most experienced men, the older men, were diffident about making these examinations for fear of consequences ?—Yes.

34960. Those, I gather from you, are the men who can make them best and most satisfactorily—the older and more experienced men ?—Not all of them, but you would get some of the best men among those.

34961. A man who can make an examination of that kind most satisfactorily would be the most satisfactory man for a fireman ?—Certainly.

34962. Are there many of these old and experienced men who can pass an examination for a second-class certificate ?—No. I am not suggesting the second-class certificate. What I have suggested has been a special examination for firemen.

34963. These are the men whom experience has made the most competent to make a satisfactory inspection or examination ?—Yes.

34964. These are men who could not pass a second-class certificate ?—No.

34965. What examination is in your mind to qualify a fireman ?—A knowledge of ventilation chiefly.

34966. Do these men know anything about ventilation —these old and experienced men ?—They certainly know about ventilation.

34967. Is it your idea to set such an examination which these men can pass ?—Such an examination as a practical man could pass, or one which an impractical man could not pass, so hat he would not be appointed to the position.

34968. People who have never really worked at the face may know something about that ?—Yes.

34969. A man who had experience on the roads as a timberman may know something about timbering ?—Yes, and ventilation, but there are other things he would not know.

34970. What are those ?—The experience of dealing with the roof in the coal face. There is a vast difference between treating the top as you take the coal out, and when you are back perhaps five hundred or six hundred yards from the coal face where the thing has settled.

34971. You want the firemen to watch particularly the dangers at the coal face ?—Yes.

34972. The men who work at the coal face do the timbering there ?—Yes.

34973. They are the most competent men in the pit for timbering ?—I would not say that. So far as the face work is concerned, I have known plenty of workmen who are excellent workmen so far as timbering in the face is concerned, but possibly you would find men who had not been near the face who would be better in timbering on roadways in certain positions.

34974. It is not necessary to work as the face to become a good pitman ?—Not to be a good timberman.

34975. Is it necessary to be capable of examining for gas without working at the face ?—Possibly he may find gas on the roadways, but so far as having an experience of blowers, or anything of that kind, he would only get that at the coal face.

34976. He can get that without working at the coal face ?—No. You get your blowers as you are working near the coal.

34977. He does not need to be working in the coal face to get experience of a blower ?—He would not get any experience so far as working in the coal face. He would get experience when it occurs, but unless he has been working in the coal face before he would not be capable of dealing with it.

34978. Have you in your mind the examination yon would suggest for these examiners ?—Yes, the examinatiou would have to be an all-round practical knowledge of the working of the colliery, not taking in much of the theory. For a second-class certificate you require knowledge of mining, arithmetic, and a knowledge of surveying. That, I think, is not dispensable to a colliery manager.

34979. Do you think it important for an examiner to know something about the constitution of air, and what percentage of gas would be safe ?—He would require a smattering of theoretical knowledge. As far as that is concerned I think if he has a sound knowledge of ventilation there are sufficient officials over him to take charge of that work.

34980. They would have to teach him ?—No.

34981. You have not any definite system in your mind as to what the examination is to be ?—No, other than what I stipulate, that they must have practical knowledge.

34982. Who should conduct the examination ?—I should suggest it should be formed under the Home Office.

34983. And a certificate granted of a still lower degree than the second class ?—Yes.

34984. You would leave the manager to appoint anybody he thought fit who had a certificate ?—Yes.

34985. But he should not be able to appoint one of the old and most experienced men, even if very competent, unless he had a certificate ?—The same thing would apply there as applied when the second-class certificates became compulsory.

34986. He would be excluded from appointing these men because they had not the certificate, although they might be more competent for the work ?—My opinion is that the more experienced men would be able to pass the examination.

34987. With regard to fines you agree it would be a very hard case where a man who had never been before the magistrates at all and had lived a respectable life and was proud of it, because of some unintentional breach, should be brought before the magistrates ?—I agree with that.

34988. You would approve in that case of it being dealt with by a fine ?—Yes.

34989. Are you familiar with the provisions of the Truck Act as to fines ?—Yes.

34990. Do you know it must be with the man's consent to begin with ?—Yes.

34991. And it must be reasonable ?—Yes.

34992. There must be an agreement in writing ?—Yes.

34993. And if it is unreasonable the excess can be recovered from the employer ?—Yes.

34994. You know all that ?—Yes.

34995. Can you suggest any other provision that might be necessary to secure a workman from oppression on the part of a manager imposing a fine ?—You have in this case the proper protection. Instead of leaving it to the manager to decide absolutely and take full control as to the amount of the fine, say a representative of the working men should be there with the manager in deciding the point.

34996. The representative of the workman is not necessary. You could go to the county court if a fine is excessive. First of all the man who imposes the fine is

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liable for committing a breach of the Truck Act, and to penalties. In addition to that the excess could be recovered from him in the county court. What more protection could he have than that?—It is a very awkward thing, once a manager has fined a man, for him to take action and say "You fined me too heavily." We know what the result would be if he took the manager into the county court and recovered what he considered the excess. Very few workmen would care to do so.

34997. In what respect do you propose to alter the law?—I think there ought to be a mutual arrangement between the manager and the workmen at the collieries with regard to this. I have had experience of certain cases.

34998. What sort of arrangement do you propose? That is what I want to understand?—I do not know that I could define it. If you want me to define it in a legal form I could not, because I am a collier and not a lawyer.

34999. Would you have a list put up to show that men are liable to such a fine?—I would not agree to a list of fines. I would take every case on its merits.

35000. That is what the Truck Act does, and the agreement must be come to between the employer and workman as to whether he would pay a fine or not, and there are various provisions to guard him from any oppression. Do you not think that is enough?—So long as the workman has a friend, you mean to say, who would have a voice in deciding the matter.

35001. That means a trial in each case?—It is a mutual trial. I have an objection to taking a respectable man before the police court in particular cases.

35002. You do not think the protection given by the Truck Act is sufficient?—I believe so far as the Truck Act is concerned that there is protection, but I do not think that the protection given by the Truck Act would be available, or that the man would avail himself of that protection except in a few instances.

35003. You can give a man facilities, but you cannot make him exercise them?—It is very difficult for a man to avail himself of the provisions of the Truck Act against a colliery manager.

35004. If a man says, "I ought to have fined you so much," and the workman says, "I will not pay it," there is an end of the thing?—There is prosecution.

35005. Or dismissal. If he says, "I agree to pay a fine," notwithstanding he agrees to it, if it is excessive he can recover it back.—I think if he has the right to say he will agree to a fine, he ought to have some right in saying how much that fine will be.

35006. He says, "I will not pay it."—You have a cumbersome form to go through to go to the County Court to recover what is excessive.

35007. You must go to somebody.—Why not recognise the workmen's representatives in the matter, and finish with it?

(*Sir Lindsay Wood.*) If a man commits a fault he is called to the colliery to explain, and the manager says, "I fine you 5s.," and the man says, "I will not pay." "Very well," says the manager, "I will prosecute you," and there is an end of it. If he says "I will pay 5s.," he pays it.

(*Mr. Ratcliffe Ellis.*) You do not want to discuss the question with the workmen's representatives. The man says, "I will not pay," and then the manager says, "I will prosecute you."

35008. (*Mr. Smillie.*) You agree that the law should be the same for miners as for managers?—Certainly.

35009. You admit that there might be offences which would be met provided that the fine was mutually agreed upon without any threat or friction on either side?—Certainly.

35010. Would you be prepared to go the same length with regard to an offence by the manager. Would you be prepared to go the length of putting power into the hands of the mines inspector to fine a manager for a breach of the Act?—No: it would not be in exactly the same position.

35011. Do you not think a manager would gladly pay a fine rather than go to Court about a breach of the Mines Act?—Yes, but the position is this in the one case I am suggesting that there should be a joint Court of workmen and management, and in the other case you are suggesting that the workmen should be excluded altogether from the tribunal.

35012. The prosecutions and fines you have been dealing with are for breaches of a special rule, or some clause in the Mines Act, which may endanger the lives of the workmen?—Yes.

35013. Do you think any fine at all is adequate in a case of that kind where a person deliberately commits an act of danger?—I would not agree to a fine under those circumstances. It is only under exceptional circumstances that I would be prepared to consider a fine.

35014. Take the case of a person who may innocently take down matches in his vest or jacket without knowing it, and it could be clearly proved that he was a non-smoker and took them down accidently, would not a warning from the manager be sufficient without a fine at all?—I would agree to a warning rather than a prosecution.

35015. If the principle of fines is admitted at all you do not know where it is going to stop.—You want to be very careful with them, I agree.

35016. Had you colza oil in the firemen's examining lamp as well as the ordinary workmen's lamp?—In the ordinary lamp there was colza, but in the fireman's testing lamp it was a vegetable oil. One was a spirit and the other a vegetable oil.

35017. That is rather a scientific question which it is as well should be decided by scientists?—Yes.

35018. That is the reason you mention it?—Yes: I mention it to bring it before you.

35019. You think the examiner should have the best oil and the best possible lamp?—I think he should have the most sensitive lamp possible.

35020. Do you think it is a common thing in your own district of South Wales to appoint the least competent men to the position of foremen or overmen?—I would not say it is a common thing. In justice to some of our managers I must say there are some of them who are training young men and bringing them up in the collieries who have attended the mining classes and have taken certificates, and there are some managers who have given them every encouragement, whereas there are others who take the opposite view.

35021. Is not that the best way to get efficiency?—Yes.

35022. To train them under the eye of the company themselves, and if possible give them the highest scientific knowledge and also practical knowledge?—Certainly.

35023. The question of remuneration sometimes has to do with it?—Sometimes. It is difficult to get colliery examiners to take on the position because the pay is too low and the hours too long.

35024. Mr. Abraham and myself are very glad to have our own witnesses to give praise and admit honour where honour is due in every case. In your case many employers you know are doing their very best to obtain the highest efficiency?—There are several, I may say, who are doing their best.

35025. There have been cases in which the best men have not been appointed?—Yes; there are two instances now close to our district, the one I have just given, and the other instance is where the conditions under which the firemen have to work are such that they would prefer what I call the better class of workmen not applying for the position. The result is that they have to take inferior men for the position.

35026. With regard to hours?—With regard to hours and with regard to wages.

35027. Taking the hours into consideration, and the low wages, you think that the best class of workmen are not likely to take the position?—Yes.

35028. (*Mr. Cunynghame.*) You agree that working miners ought to get help in bettering their knowledge by lectures or anything else to improve them?—Yes.

35029. What sort of help do you get in South Wales towards bettering yourselves? What is there to enable young men to know more about the dangers and the work and everything?—We have technical classes instituted under the County Council Secondary Education Committee.

35030. How far is the place from where you work where the class is held?—It is a matter of about a mile.

35031. How often do they hold a class of this kind?—The classes are held through the winter, say once or twice a week.

35032. Do you know what pay is given to the teacher at those classes?—I could not tell you exactly.

35033. What is his position and rank?—His position and rank is in one case the holding of a second-class manager's certificate, and having passed through the same classes, and the other one in another class has had three years experience of teaching at the University College at Cardiff in the Mining Schools there.

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Mr. W. Harris.

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35034. Has he apparatus to show experiments?—That is a difficulty, I understand, from members of the classes at Abertillery, which they are all suffering from.

35035. He has not money enough to spend on lamps and things that might be useful?—That is so.

35036. I am not asking you to criticise any particular man, but would it be better for you if you had a man of greater skill and knowledge as a lecturer? I do not ask you to condemn that man, because I am sure he is doing his best and is as good a man as can be?—If we had what I may call a thoroughly good man for the County, he would be able to assist those others at the various classes and get around—say pay periodical visits and assist the local teachers. I think greater care should be given to the question. Glamorganshire, for instance, has been fortunate in getting an excellent Director of Mining Instruction, but I do not think that we have been so fortunate in Monmouthshire. I think there is a weakness there.

35037. Do you think that the County Council is doing all they can to promote the miners' education, or do you think that they might spend more money than they do now?—I think they might spend more money on that purpose. I think there is a wrong spirit prevailing at the County Technical Committee. I will give you an instance. The last two or three years the classes in Abertillery have not been so successful in mining as hitherto. We say owing to certain facts that there is no encouragement given to the young men to attend the classes, because after years of study they find somebody who has not troubled to acquire knowledge is promoted over their heads. The result is the classes have gone down, and the County Council Committee in allocating grants to the various centres have taken last year's grants or the last year's percentage of earnings as a basis for this year. The result is that where a district is really on the down-grade so far as technical instruction is concerned, instead of assisting the County Council Committee are really bringing pressure to press lower instead of assisting to raise them.

35038. In your opinion some steps would be more useful that would promote the education further, purchase of apparatus, and so on?—I certainly think so.

35039. (*Mr. F. L. Davis.*) With regard to Rule 38, you have told us in this case you mentioned here to-day where a man had to apologise?—Yes.

35040. Do you know any cases where the men have had to suffer? You say the general complaint is that men are afraid of making these examinations because they may suffer?—It is most difficult to trace. The men contend, of course, that they know—in fact I have had an experience of my own, where men have said they would not come with me again because I gave too bald reports, and they say "You are sure to be marked one of these days." That is the general impression.

35041. In this case you mentioned the man did not suffer. He was not discharged. Things were not made unpleasant for him?—It is made that unpleasant he is afraid to take on an examination since.

35042. I understand that the men do not care about making these examinations?—The result is we cannot get the best class of man to make these examinations.

35043. You were the agent in the district?—I have been connected with it for the last ten or fifteen years.

35044. You are one of the officials in the district?—Yes.

35045. If any of these men had suffered it would have come to your knowledge?—Things come to our knowledge that very often we know are true but we cannot prove them. The difficulty is to prove the case up to the hilt.

35046. Any cases of injustice in your opinion in your district are brought before you to investigate and try and put them right?—Very often the punishment is not meted out by the manager in the form of dismissal, but possibly by the under-manager or fireman, or overman of that particular district. The only instance I know where a manager has taken action is the instance I have given. That is as to the pressure brought by under officials. I believe there are quite a number.

35047. Is not one of the reasons that the men do not care about these examinations that it is rather hard work and the pay allowed them by the Federation is not very good? What do you pay?—We pay 8s. a day, and in the neighbouring colliery to us they pay 10s. a day.

35048. Is it not a fact at the present time that with wages at the maximum a pretty good collier can earn a good deal more than 8s. a day?—That is a maximum and it is a minimum with us. It is the same all through.

35049. Is not that one reason why the best men who earn good wages as colliers will not make the examination?—If the refusal had been during the last few months that might be so, but it has been during the last few years, so that the refusal was made when wages were low.

35050. On the question of fining I suppose you thoroughly approve of discipline in the colliery?—Certainly.

35051. Discipline can only be good if the manager has a free hand to deal with his own officials and the men?—I believe this, that the manager can succeed in obtaining discipline very often more by taking the Workmen's Committee into consideration than ignoring them. That has been my experience.

35052. He may do it in several ways?—That is the most efficient I have seen.

35053. It depends on the manager?—It depends on the co-operation of the manager and the Workmen's Committee.

35054. It depends certainly on the co-operation of the men, but the manager is the man who is responsible, at any rate?—Yes.

35055. There is one thing I could not undersatnd with regard to the fines. You do not approve of the manager being the determining factor?—Not the sole determining factor.

35056. Who do you suggest the other man should be? Is it the checkweighman?—No, the chairman of the Works Committee, or a deputy of the workmen.

35057. Do you think that would tend to discipline?—Yes.

35058. If a manager wanted to fine a man for a breach, and the chairman of the Works Committee said "You shall not," and they could not agree, what then?—The manager has the alternative then of prosecution.

35059. Do you not think the result of your suggestion would be that there would be no fines at all to speak of, but all prosecutions?—No. I am hoping to find that there would be some reasonable managers.

35060. I suppose that there are never any unreasonable chairmen of Works Committees?—Sometimes there are, of course.

35061. My point is the manager is responsible and has to maintain discipline and if he says this fine shall be inflicted, unless the man likes to be prosecuted, and another man says "You shall not fine him," he cannot have discipline if he is to be dictated to?—I cannot conceive a chairman of a Works Committee who is anxious that a certain man should not be prosecuted, being unreasonable in deciding the amount of the fine, because he knows the manager has the alternative of imposing prosecution, which is a greater punishment than a £1 fine.

35062. I understand you agree that for the less serious offences fines would be better?—Yes.

35063. How often have you acted under Rule 38 as a mines inspector yourself?—I have acted more or less for the last 15 years.

35064. As an inspector under Rule 38 how often have you been down the mine inspecting on behalf of the men and reporting to the management?—30 or 40 times.

35065. You have sometimes made an unfavourable report?—Certainly.

35066. Have you ever suffered from making an unfavourable report?—No, but it so happens I am in that position, and I would be less likely to suffer than most men.

35067. Why?—Because I am a district official.

35068. And always have been?—I have been for the last 10 or 15 years.

35069. During the whole time you have made these inspections you have been a district official, and consequently a man of some importance, whom it would be rather a difficult matter to punish?—That is so.

35070. (*Chairman.*) Do you wish to say anything more?—No.

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Mr. MICHAEL ROACH, called and examined.

35071. (*Chairman.*) You appear on behalf of the South Wales Miners' Federation, Monmouth Western Valleys District ?—Yes.

35072. Does that mean you are only empowered to speak on behalf of the miners in the Monmouth Western Valleys District, or on behalf of the whole of the South Wales Miners' Federation ?—I speak for the whole as well as the district.

35073. We have had a good deal of evidence on behalf of the miners which pretty well agrees with what you say: "That additional inspectors be appointed of a different class, with wages in accordance of about £156 to £175 a year salary with travelling expenses. The number of men reduced over which such inspection made." It has been suggested to us that these additional inspectors should have their work apportioned out, that the district should be divided up, that there should be a chief inspector and one or two or three assistant inspectors, and perhaps three or four third-class inspectors for each district, and these third-class inspectors should have a separate district assigned to them ?—That is so.

33074. So that each of these third-class inspectors would only have a comparatively small district. They would have over them an assistant inspector, who would have general supervision, I suppose, over three or four, or two or three, at all events, of these third-class inspectors, and both the assistant inspectors, and the third-class inspectors would be under the chief inspector, who, in case of necessity, could tell these third-class inspectors to go where he pleased, even outside their district ?—They should be under the entire control of the chief inspector.

35075. That is to say, under the immediate control of an assistant inspector and the ultimate control of the chief inspector of the district ?—That is so.

35076. How many would you require of these men in order that the mines might be inspected in accordance with what you consider sufficient inspection ?—I think there should be a sufficient number appointed to make a thorough inspection at least once in every three months.

35077. Not a sample inspection, but to go through every mine thoroughly once in three months ?—That is so.

33078. Have you formed an opinion as to how many you would require ?—No. I think they should be appointed to meet circumstances, and so as to be able to thoroughly examine every mine once in three months.

35079. With regard to the examination for the men who would be inspectors, you would have them pass a qualifying examination ?—Yes, but they should be practical and competent as well. There ought to be a qualification such as you suggest—that they ought to hold a second-class certificate.

35080. They need not be so fully qualified as the other two classes of inspectors ?—No, only to have the practical knowledge.

35081. You would not, as a rule, suggest that they should be promoted to be assistant inspectors or chief inspectors; but if a man showed great ability, he might pass the examination for chief inspector and become a chief inspector or an assistant inspector ?—That is so.

35082. With regard to General Rule 38 you say, "The examination be taken without any limitations by the workmen." That is, taken as often as the workmen desired ?—Yes.

35083. You do not think at least once a month is sufficient ?—There is a colliery in our district where it has been obvious we ought to make the inspection on two or three occasions in the month.

35084. Occasions may arise where it would be necessary to make two or three inspections a month, but as a rule once a month would be enough ?—Yes.

35085. Do you agree with what has been said by the other witnesses, that the men who make these inspections are afraid of giving a truthful report of the mine if it is unfavourable ?—I agree that to a certain extent that is so, but there are exceptions. Of course I have a case in my mind where the workman made an inspection of a certain colliery in my district where there are 1,500 men employed, and through the truthfulness of his report the men laid idle for two days. Without offence to the manager of that colliery, I do not think any advantage has been taken of the man who made the inspection. I have made careful inquiries.

35086. You have known where men have made unfavourable reports, and where the management have taken it in a proper spirit ?—Up to now that is the only case I have in my mind. In the majority of cases the men are somewhat afraid to make a truthful report. If they do, they know there is a penalty attached to it.

35087. With regard to inspection by officials under General Rule 4, you are prepared to say very much the same thing as the other witnesses have said. You say, "The places of inspection should be limited." That is to say, the districts ought to be less than they are at present ?—Yes.

35088. "That the examination be done leisurely by the officials—a different method of selecting firemen other than by the management." What other method do you suggest ?—I think in accordance with the recommendation of the management to the chief inspector of mines.

35089. That the chief inspector of mines should be given power either to accept or reject the recommendation of the management ?—Yes.

35090. What would he act upon in rejecting or accepting his selection ? Would the workmen make representations ?—The management could give the qualification of the individual.

35091. Supposing a workman objected to a person being appointed fireman, it would be open to them to communicate with the manager and say they do not think he is an efficient person for the reasons set forth ?—Yes.

35092. "The hours be reduced to eight—the duties should be confined to firemen alone." We have had a great deal of evidence upon that point. I do not know whether you care to add anything ?—There is one matter with regard to the appointment of the firemen I would like to call attention to in my district. In June 1906 one of the firemen at a large colliery, where there are 1,700 men and three pits which are in direct communication and ventilated by the same ventilating apparatus, permitted the men in June to go in the working place when charged with gas, with the result that he was dismissed. It is essential in such cases that the man should be thoroughly practical, and have a proper knowledge of the work with which he is entrusted.

35093. Do you suggest that there should be an examination, oral or written, to qualify a man to act as a fireman?—I do not suggest that there should be an examination. I do not know that a certificate in accordance with the second-class certificate would be necessary in these cases. I can give the name of the colliery privately to the Secretary if you desire it. This man held a first-class certificate.

35094. He would be eligible so far as examination was concerned ?—He was incompetent, and they dismissed him. They did not dismiss him on this occasion, but he permitted them to go into the same place afterwards, and the day fireman found him out,

35095. Then with regard to the standard of discipline by fining or prosecution you say, "The method of prosecution under rule remains unaltered." I do not know what you mean by that.—I think in all cases of breaches of rules by the men they should be prosecuted.

35096. There should be no distinction between trivial offences and more serious offences, or offences that merely affect the efficient working of the mine and offences that imperil the lives of the workmen. You think in all cases there should be prosecution ?—That is my opinion, because I think the desired effect would only be obtained by prosecution. If it was left between the management and the workmen's officials to agree upon a fine, I do not think an agreement would often be come to. I think the salutary effect on the body of workmen would only be obtained if men were prosecuted instead of being fined.

35097. With regard to establishing Special rules, you say the workmen should be represented in the establishing of rules, as they are expected to observe them. We have had a great deal of evidence upon that point. I do not know whether you care to elaborate that ?—No. I agree with what Mr. Watts Morgan said when his evidence was taken. If special rules have to be established, I think men should be represented in the establishment of those rules.

35098. With regard to falls of roof and sides, you say, "There should be systematic timbering on all roadways,

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Mr. M. Roach.

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the workmen given the right as to the use of such." You have heard the evidence that has been given by Mr. Harris. Do you agree with that?—Yes, to a certain extent.

35099. You have nothing to add to what he said?—I think it should be so. I have gone into this matter very carefully throughout my district since 1906, and I find out of a total of 95 accidents for that period, there were 31 from falls of roof and sides, or about 33 per cent.

35100. As to haulage. You say, "The same be suspended while men are travelling, or that all return-ways be made so that the men could travel to and from their work through the return; that the haulage road be wider to permit rider to jump off journey in case of accident by falls of roof or sides or breakage." That, I think, has been sufficiently covered?—Yes, that has been covered. I have also gone into that matter very carefully, and taking the period in which I stated the accidents from falls of roof and sides, from 1900 to 1906, the accidents in haulage main roads and headings in my district have been 19 out of 95—about 20 per cent. of fatal accidents.

35101. What do you mean by a separate code of signals?—I mean where a haulage engine is bringing coal from two separate districts that there should be a separate code of signalling from each district.

35102. The signals are somewhat jumbled up. You do not know where they come from?—That is so.

35103. Is there a separate code of signals in many mines you know of in South Wales?—Yes, some.

35104. In some there are, and in others there are not?—Yes.

35105. With regard to safety lamps you say, "Should be extended to all mines where the slightest detection of gas may be found." You mean where there is a cap found?—Yes.

35106. As to investigation into mine accidents you say, "In fatal accidents that men or men's representatives be permitted to visit place of accident." Would you suppose any manager of a mine would prevent properly accredited representatives going down to see the place of accident if desired?—I do not suggest they would prevent it at all, but if it was compulsory, of course, there could be no objection, could there?—I believe it should be compulsory.

35107. You do not know of any instances where such permission has been refused if it has been applied for. Is it often applied for?—Yes, in a number of cases.

35108. It is generally granted?—Yes.

35109. You do not know a case where it has not been granted?—No.

35110. As to the importance of tram loading, you say, "The trams be loaded to their level to prevent coal being strewn on main haulage roads." That is, loaded not above their level?—Yes. I have nothing to add.

35111. "The danger of breaking of trams when loaded with coal." That means the trams ought to be kept in a proper state of repair?—Yes. The short point is that the trams in operation in South Wales now are such that men have to load 2ft or 3 ft. above their level, with the result on the main haulage roads they have a great tendency of breaking down, and coal is dropped about until it accumulates seriously.

35112. Not only loaded so that the coal falls off the top, but also sometimes to break down the wagons altogether?—Yes.

35113. (*Mr. Ratcliffe Ellis.*) With reference to the firemen, should not the manager have the appointment of his own firemen. Do you think the inspector should appoint his firemen?—I do not think I suggested that. I suggested, I think, that if the management is desirous of selecting a fireman, he should state the qualifications of the person selected to the inspector for his approval.

35114. That is to say, the inspector would decide whether the fireman should be appointed or not?—He would have that power.

35115. Do you think if that were done it is right to leave the responsibility upon the manager if he has not the right to appoint his own fireman?—He would have the right to appoint him.

35116. The inspector decides who is to be appointed. Supposing he is a good man he wishes to appoint, and the inspector said, "You must not appoint that man," and mischief happens. Is he to be held responsible?—I think you beg the question with regard to the inspector. I do not mean to say that he should be the decisive factor in appointing the man, but that the man's qualifications should be submitted to him. The management should have the control of selecting the fireman.

35117. What is the object of putting his qualifications, before the chief inspector?—To secure better men, of course.

35118. Is he entitled to appoint a man after putting his qualifications before the chief inspector, whether he approves or not?—To my mind, under those circumstances, if the manager had to state the qualifications of any particular individual whom he desired to be a fireman he would not select the man that is selected at the present time.

35119. What control is the manager to have in appointing his firemen? Anyone he thinks a proper person he submits to the inspector?—That is so.

35120. But the inspector could not say, "You shall not appoint this man." He is simply to have his qualifications?—That is all.

35121. With reference to the falls of roof and sides, where do they generally happen—in the roadways or at the face?—In the roadways. Out of that number I gave you there were four which happened in the face. The remainder of them happened in the roadways, headings and haulage.

35122. How many on the roadways, headings and haulage from falls of roof and sides?—About 25.

35123. Out of 30?—25 out of a total of 31.

35124. A great proportion of the accidents do not happen at the face but on the roads?—Yes.

35125. To what do you attribute that?—I could not say what I attribute it to. I have known cases where, through the restriction of the workmen in putting up timber, an accident has happened in that direction, but I would not like to say that the whole of them happened in that way.

35126. Can you suggest how that large percentage of accidents can be avoided?—I have known last year where two men met with fatal accidents in my district, and that was, in my opinion, through the roof not being properly timbered. That was on a main haulage road. One was a timberman and the other an overman.

35127. Do you think it is because the timbermen are not qualfied?—I think if that place had been timbered, the accident would not have happened when the men were sent to work there.

35128. In the haulage roads there is no question of paying for this timber. The men who look after the haulage roads can put up what timber they like. They are not like the collier who is only paid for what timber he puts up?—There is in the headings. I am speaking about the headings now.

35129. Have you any statistics to show what proportion happens in the headings and what proportion in the haulage roads?—No: I am giving you a case which happened.

35130. Have you any statistics to show the proportion?—No.

35131. You say a great many of these accidents happen in the haulage roads?—Yes.

35132. It is important to see how many happen in the headings?—I said haulage, main roads, and headings.

35133. I want to know a little more that that. At the face where the collier is answerable for the timber there are comparatively few out of the total number, but on the roads there are a great many. These roads are partly timbered by men who are paid for it, and who have no reason for not putting as much timber as they wish. Then there is the gate, the entrace to the working face, where the collier has to do the timbering. Have you any statistics to show the proportion that happen in the haulage roads when the timbering is done by the timberman, to compare with those which happen in the gates when the timbering is done by the collier?—No.

35134. Could that be obtained, do you think?—I could not obtain it, so far as I am concerned, because if a claim is made for the accidents of which I have given statistics, it is a fatal accident in the roadway or the face, and I should not know whether it was a haulage main road or a heading.

35135. What are the character of the haulage accidents in your own district for which you have returns?—The character of those accidents would be through a shackle

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breaking or a rope breaking, or, as I said, by the trams being loaded and the coal being in the middle of the roadway so that it would throw the trams off the road and cause an accident in that direction.

35136. I want to see if in your statistics you can point to any particular class of accident which has caused loss of life or serious accident to any persons employed ?—No, the notice of this comes to me in a general way.

35137. You cannot point to any particular matter in connection with haulage where further safety should be secured or where you think some improvement might be made ?—I think the roads ought to be kept cleaner and ought to be made wider.

35138. Are these accidents attributable to the roads not being kept clean ?—I could not tell.

35139. (*Mr. Wm. Abraham.*) In the face, timber paid for or not paid for has to be put up at stipulated distances ?—Yes.

35140. Whether it is necessary or not ?—That is so.

35141. In the roadway there is no such stipulation ?—No.

35142. Independent of any payment at all, it is your opinion that if there was a stipulated distance, according to the necessity of the mine, for the timber to be put up, that would be the means of reducing these accidents to which you have referred ?—I believe it would.

35143. If the stipulation, which has proved to be a safe one for the men in the pit, was also made for the men in the roads, that would bring about the same result, the lessening of accidents ?—I think so.

35144. This is a very important point. You are clear upon that point in your own mind ?—I am profoundly convinced as to that. I do not suggest men should use timber where it is not necessary, but I think if there was a stipulation, such as you suggest, it would minimise the fatal accidents.

35145. What class of men are injured on the roads in the accidents you have spoken of ?—They are hauliers and riders and timbermen.

35146. What was the position of the haulier when he was injured ?—I have one case in my mind which I know fully about. It was because of insufficient room. One went to lift the tram on with the horse and if he had had a place to jump to on one side, there is no doubt his life would have been saved.

35147. One case is worth a thousand opinions. Have you another case of a timberman getting killed. If so, what was his position and what was it attributed to ?—I referred to the case in answer to Mr. Ellis of a timberman and an overman. If the place which they were sent to secure had been timbered they would not have been killed.

35148. That is systematic timbering again ?—Yes.

35149. You have mentioned 31. Could you give us other instances of other men that were killed. Will you tell us, if you remember, what they were doing at the time ?—I could not bring them all to mind now.

35150. Is your opinion based upon your own knowledge of these facts. If the roads were wider and there were places for the men to turn into the instant they saw danger, do you think that would be a means of reducing these accidents ?—That is so. I have one case in my mind where a man was killed after the fireman passed through his place. It was mentioned by the previous witness. The fireman thought the place was absolutely safe, but in a short period of time, 20 minutes or half an hour, a man was crushed to death. At the inquiry Mr. Martin almost went so far as to say that the man's death lay at the fireman's door. If systematic timbering had been insisted on in that case, that man would not have been killed.

35151. What is your opinion with regard to using the return airways as travelling roads ?—I think it would be very much safer to the men, particularly coming from their working place. In the majority of cases I think, going to their working places the haulage is not in motion, but in coming from their working places in the majority of cases it is in motion. If the return airway was kept in that condition I believe it would be conducive to the safety of the men.

35152. You have been a practical miner ?—Yes, I have had 22 years' experience.

35153. Do you think there is any special difficulty beyond what we all know, that there would be an extra first cost in doing it ? Do you think there is any practical difficulty in doing that ?—I do not think so. I quite agree with you so far as the first cost is concerned there would be that difficulty, but after that I do not think so.

35154. If that was done, making the return airway a travelling road, would be better than the widening of the intake where the trams are travelling ?—That is so.

(*Mr. Ratcliffe Ellis.*) The witness said he had also to consider the safety of the men on the trams.

35155. (*Mr. Wm. Abraham.*) Having extra travelling roads would reduce a certain number of accidents which are not actually caused by trams ?—Yes, there is no doubt it would. I think the return airway should be kept in that position, so that a tram could pass through it at all times.

35156. That would increase the ventilation of the colliery as well as increase the safety ?—Yes, and furthermore it would be the means, where a serious accident happens in mines which are three-quarters or a mile, of facilitating the removal of the injured workman or workmen by being able to bring them that way instead of through the main intake where they are exposed to the cold.

35157. (*Mr. F. L. Davis.*) On the question of trams I think you stated that the trams are very often loaded in South Wales between two and three feet above the top of the tram ?—Up to two feet, I think I said.

35158. I think you said two to three feet ?—Very well if I said so I did, but I think there is some exaggeration. I would say up to two feet. I do not think they are three feet.

35159. Would it not be more correct to say from 1 ft. to 18 ins. That would be more like the state of things ?—Yes, I agree with you in that, although I do not think I should be exaggerating very greatly. I think I have a colliery in my district where they are loaded very nearly a yard.

35160. I suggest if it were as high as 3 ft. he must be a very good loader ?—They are good loaders.

35161. We do not say we have not good loaders, but he would be an especially good one. What about on an average do the trams hold as they are loaded on ordinary work at present time ?—It would be very difficult to give the average of the various collieries, but in the top colliery, 22 cwt. to 23 cwt., and in the next 23 cwt. to 24 cwt., and the next above that 26 cwt., and the one below that I think I would not be exaggerating to any extent in saying a yard, 27 cwt. or 28 cwt.

35162. On an average from 20 cwt. to 25 cwt. ?—Yes, on an average.

35163. The haulage roads and the stall roads must be kept fairly high and in pretty good condition ?—Yes, the height could be kept, but the width may not be there after all.

35164. It has not come before me personally before that they are loaded so well that sometimes the trams break down. Do you really mean that ?—Yes, I do mean that.

35165. You mean the tram itself, which is an iron tram, breaks down because of the weight of the coal in it ?—No, I do not say it breaks down because of the weight of the coal in it, but if a little stone out of the side tumbled on the rail in the course of that journey, going up and down the road, it would throw the tram off, with the result that they would go into one another and knock them about.

35166. You said it was because they were heavily loaded that the trams broke down. This is another position you put now, that the trams occasionally go off the rails. That I can understand ?—You could understand the other point, too, that there are occasions where they break down.

35167. Do you not really mean when the trams go off the line and the coal is spilt about, that it interferes with the haulage ?—And there are occasions where they do not go off and they break down.

35168. Can you give one instance of a tram that has broken down from the load of coal on it ?—I have been from underground 9 or 10 years, but I have seen it in my own experience. I could name the colliery if you desire it.

35169. Did the bottom fall out, or the side ?—The side, and I have seen the front and the end falling out.

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35170. What is your chief reason for suggesting that the trams should not be loaded so high ?—To prevent this—you have requested me to give my opinion upon it —to prevent the breakages.

35171. Is that the only one ?—No, because the coal after it has broken down, creates confusion if it remains there too long.

35172. Do you think the men in the stall roads should put up timber whenever they think proper without the sanction of the management ?—I think inasmuch as they have to use their discretion as to safety in the working place, that they should use the same discretion in the roads. I do not suggest that the men should put up unnecessary timber.

35173. A man in his place puts up the timber to keep himself safe ?—He has to do the same thing in the roads.

35174. But he is paid for it ?—Yes.

35175. Do you think it is reasonable that the man there should be allowed to put up as much timber as he likes and get paid for it without the sanction of the management ?—I think it is reasonable he should put up sufficient timber to meet his own safety and that there should be a maximum in the road the same as there is in the working face.

35176. There are very few accidents at the face ?—Yes.

35177. Has there ever come before you at all a man who has a hard place or a man possibly—there are some occasionally—who may be rather a lazy workman, and who likes to put up extra timber because he gets paid for it, instead of going on with his work at the face. I suggest that to you. If the management is not to decide that man can put up as much timber as he likes and eke out his wages ?—Not if there was a maximum distance.

35178. We are not talking about systematic timbering ? —I say if there is a maximum distance he could do so, and I do not think any man who has any common sense whatever would use timber that was not necessary.

35179. Not the great bulk of the men, but you can conceive it ?—I can conceive an exception, certainly.

35180. It is better for them to work at the coal face as a rule. With regard to systematic timbering you think there ought to be fixed distances in every colliery all over the country ?—I do.

35181. In the stall roads and in the faces, everywhere ? —Yes.

35182. You know from your experience that the conditions in certain collieries differ very much from the conditions in others ?—Yes, I know that.

35183. Do you think it would be a wise thing to state certain distances which timber would have to be put up all over the country ?—I think so. For instance, I gave the case to Mr. Abraham where the fireman thought the place was safe and the maximum distance was not observed. The workman thought the place was safe and down comes the top and kills him.

35184. Do you not think it would be a hardship to other collieries which have good roof, and where very few accidents happen from falls of roof and sides, and whose timbering cost generally is small, that they should put up just as much timber in their place as a colliery which has a bad roof and is difficult to keep up ?—Yes, I think they should.

35185. Do you not think that would be a hardship ?— It may be a hardship, but after all the safety of the men is to be considered in the first place.

35186. Do you know many districts besides South Wales in England ?—Yes, I do. I never worked in any English district. I have worked in several districts in South Wales.

35187. You would say, I suppose, or you know, possibly from general report that there is hardly any other district in the country that uses more timber than we do in Wales ? —I do not think there is.

35188. Do you not think there is a difficulty in laying down a fixed law that timbering, in the same way as many other points, should apply to the whole of the country where the conditions are very different ?—There may be a difficulty, but after all the safety of the workmen is the first consideration I believe.

35189. That is your opinion ?—That is my opinion.

35190. (*Mr. Wm. Abraham.*) He has not suggested the same distance should be marked all over the country ?— I said a maximum.

(*Mr. Wm. Abraham.*) A maximum, according to the circumstances.

35191. (*Mr. F. L. Davis.*) There should be a maximum ? —Yes.

35192. Who is to decide in each particular colliery, according to the circumstances, what the distances in that colliery are to be ?—I think the Home Office should decide that.

35193. The Home Office ?—Yes, through the inspector's report of the colliery.

35194. That really means the inspector ?—Yes.

35195. He should decide in each colliery what the distance should be ?—Yes, the Home Office through the inspector.

35196. Do you not think, if the inspector had to decide for each colliery what the distance should be that would take the whole responsibility off the management ?— I do not think so.

35197. I suggest that it would. Do you think it is wise to do anything to give the inspectors more power than they have at the present time in such a way as to take the responsibility off the management ?—I am giving you my opinion that the Home Office should decide as to what the distances should be at the various collieries, taking all the circumstances into consideration. That will not take away the responsibility of the management in my opinion.

35198. You do not want to see the responsibility of the management lessened ?—It would not be lessened then.

35199. Whether it is that or any other case, you do not want to see the responsibility of the management lessened ? —No, certainly not.

35200. (*Mr. Smillie.*) May I take it you agree with some of the other witnesses that it would be a good and useful thing to have provision made for washing at the collieries and drying pit clothes ?—Yes, I agree, and I believe the workmen would be only too delighted.

35201. Do you think it is necessary that there should be full ambulance provision at all collieries, including an ambulance wagon to take home men who are injured ?— Yes, I do.

35202. It is not done universally just now ?—No. I do not think I can point to a colliery in my district where there is an ambulance wagon. There are ambulance appliances, but they are hand or shoulder appliances. There is no ambulance wagon.

35203. The old method of taking injured workmen home was by taking them in a cart, or carrying them ?—Yes.

35204. In some cases they may bleed to death in taking a long journey in an old jolting cart ?—That is true. I have a case in my mind where we had to take one of our injured workmen in the doctor's conveyance, which was a trap—a simple trap. We had to take him to his home, which was by road about six miles, whereas if there had been a proper conveyance the man could have been taken from the pit-top at once after the examination, and no doubt it would lessen his suffering to a great extent, because he was no sooner home than he died.

35205. A simple fracture of the limb might turn into something serious before a person was taken three or four miles home ?—Yes.

35206. You have ambulance wagons at some collieries in Wales, partly provided by the contribution of the workmen and partly by the employers ?—I think there are. There are none in my district.

35207. Setting aside how it should be paid for, do you think that there should be an ambulance wagon at every colliery, or group of collieries, which may be called upon in the event of an accident ?—I think it is absolutely necessary.

(*Mr. F. L. Davis.*) You mean a wagon at the surface, after the man is brought up ?

35208. (*Mr. Smillie.*) Yes. Do you think it would be a wise arrangement to have telephonic communication between every district in the mine and the surface ?—I think so.

35209. And that could be done at very small cost ?—Yes.

35210. It should be possible for people on the surface to have information within two or three minutes either of an accident or any danger arising in any section of the mine underground ?—It is in two collieries in my district now.

35211. Do you think it would be wise to make that a universal provision ?—I think it would be.

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35212. With regard to the qualification of firemen. I was listening carefully to your answers to Mr. Ellis, but unfortunately I was not able to fully grasp the position. Do you say that the manager who is about to engage a fireman, a competent person under the Act, has to get from that person what his qualifications and practical experience are, and send that to the inspector ?—Yes.

35213. Is the inspector merely to keep a record of that ? —Keep a record of the qualifications as sent to him.

35214. Does that in any way get us out of the difficulty ? It does not improve the qualifications and competency of that person, does it ?—I think it would remove the difficulty to a certain extent. The practical and competent man who is not selected would have an opportunity then, whereas now he has not.

35215. You do not propose to give the mines inspector any power to prevent the appointment by the manager of that person ?—No, I would not give him power.

35216. Supposing a manager sent word to the inspector that he had employed John Jones, No. 4 district in a certain mine, and that Mr. Jones had been nine months in the pit, and had previously been an agricultural labourer, had only been in the pit nine months, and was working at the pit-bottom, and had appointed him as a competent person under the Act, is the mines inspector to accept that information and keep it to himself till something goes wrong with the colliery ?—That would be an exception, I think. I do not believe any manager would do that.

35217. Your provision does not give the inspector any power to interfere. Mr. Ellis put it to you, would you prevent a manager, who was held responsible for the management of the mine, appointing a person he thought fit, and would you put that power into the hands of the mines inspector, and you said no ?—No.

35218. Do you not at the present time prevent a mine-owner from appointing any person whom he may think fit or competent unless he has a certificate proving he has stood an examination ?—I do not quite grasp your question.

35219. Would the law to-day permit a mine-owner to appoint a competent person to manage his mine unless that person held a certificate ?—No.

35220. Do you think we have any right to interfere with the right of a mine-owner to appoint a person he may think competent to manage his mine ?—Providing he is qualified. That is how the law stands at present.

35221. The law lays down not only must the mine-owner be satisfied that he is competent, but also that he holds a certificate of competency ?—That is so.

35222. Would the same thing not apply to the appointment of a fireman ?—Yes, it should apply, I think.

35223. There should be, in addition to his proof that he had practical experience, proof that he had passed some examination, whatever it might be ?—Well, yes, put it at that. There should be a different method. I do not know that I could locate the method of selecting firemen ; it is a question for you. I believe there should be a different method of selection, or a different method of qualification of those men other than there is now.

35224. Mining legislation and Miners' Associations, so far as the safety of workmen is concerned, are always endeavouring to bring up the worst-managed mines to the position of the best ?—That is so.

35225. That is the position to-day ?—Yes.

35226. Consequently, we are entitled to take every precaution to make sure that in the worst-managed mines competent persons will be appointed ?—Yes.

35227. Supposing we admit 80 per cent. or 90 per cent. of the firemen appointed to-day all over the country are thoroughly competent, we do know there are persons appointed from time to time who are not thoroughly competent ?—Yes. I have given you two cases in point, one six months ago and another twelve months ago, which, were it not for the practicability of the workmen in the district those men went into, would have been blown up.

35228. Did one of those persons hold a first-class certificate ?—Yes.

35229. You said immediately afterwards that he was not a competent person ?—He was not a competent person.

35230. Might it not be he was rather a careless person ? It was not so much for want of being competent as for want of being as careful as he might have been ?—That may be so. I think he was too young for the position.

35231. Want of experience may have been the cause of the thing ?—That is so.

35232. Mr. Ellis put it to you that most of the accidents for which you gave statistics had taken place on haulage roads and headings. I think you admitted six out of 31 had taken place at the working face, and 29 on headings, haulage roads, and other drawing roads ?—Yes.

35233. Mr. Ellis pointed out to you that repairers and timbermen are not restricted to putting up timber. They are not paid by the sets of props, but by shift wages. Is it not a fact that timbermen take their orders as to where they are to go to repair from the manager or overman, or some person in charge ?—Yes, from the fireman.

35234. They do not go about indiscriminately putting up timber here and there ?—Certainly not.

35235. To that extent that falls to the ground. They are told to go to a certain place to repair ?—Yes.

35236. And are supplied with timber to put in the road ?—Yes.

35237. Supposing they passed a place in the drawing road where there was no timber for 10 yards, they would not begin to put up timber there unless instructed to do so ?—Certainly not.

35238. As a matter of fact they are not expected to repair at any part of the roadway unless instructed to do those repairs ?—Unless instructed by the fireman or overman.

(*Mr. Ratcliffe Ellis.*) It is suggested as a source of danger that the men are not entitled to put up timber where they think fit because questions may arise as to payment. That applies to the face and the entries to the face. At the face there are very few accidents and the system does not seem to be bad. I want to know what proportion of accidents happen in this gateway.

35239. (*Mr. Smillie.*) Where the miners are paid for putting up what I will call a pair of timber those are put up in the road head generally ?—Yes.

35240. They are not put up along the face in the long-wall ?—No.

35241. Consequently a miner does not get paid for setting a prop here and there along his face to keep himself safe ?—No.

35242. You have never heard of firemen coming in and knocking out those props he might have placed over the face ?—No.

35243. Where they set a pair of timber for which they are paid is in the road head ?—The road end.

35244. Sometimes they load tubs there ?—They are loaded there.

35245. It is turned out from the face to the road head and they load the tubs there ?—Yes.

35246. Consequently the loaders spend a considerable part of time right at the road head ?—Where the boys are working with men the boys are always there. They generally take on the loading.

35247. Does your reply as to where 25 accidents take place include that part from the road head down into the drawing road and the main haulage road ?—It includes that part.

35248. Consequently if miners were prevented from setting timber there where they thought it wise to do so, or if the timber was knocked out on the ground it was not required, those 25 accidents would come within that part of the roadway.

(*Mr. Ratcliffe Ellis.*) No, not the whole of them.

(*Mr. Smillie.*) A portion of the 25 ?

(*Witness.*) Yes.

(*Mr. Ratcliffe Ellis.*) What portion ?

35249. (*Mr. Smillie.*) That is a part of the road you included ?—That is part of the stall road right out to the main haulage road.

35250. A certain proportion of the accidents might take place right here where the filling went on, and the tubs too ?—Yes, certainly. I could not tell you they have done, but I can only give you them as they were sent to me ; I made claims for them. They would be falling of roof on heading or side or something like that.

35251. Is it not the case that falls are most likely to take place from the end of the heading road where the filling takes place, back 40 or 50 yards, than further out in the road because of the creep that is there ?—Yes.

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Mr. M. Roach.

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35252. Consequently there is more need for systematic timbering there than further out in the road where it is settled?—Yes, because the place is not settled as you suggest. I have had that experience myself.

35253. There is always a creep and little bits falling off?—There is always a crush until it is properly settled.

35254. Is there any ripping done in your seams, or are they sufficiently high to prevent ripping at the heads?—There is ripping in some collieries.

35255. Do the workmen themselves do that ripping?—Yes.

35256. In cases of that kind where they rip would the fireman or under-manager prevent them putting up whatever timber they thought necessary for their safety?—Yes, in some cases they prevent them. In cases I have investigated myself where they have put them up without orders the trouble is they will not pay.

35257. Even in cases where they do their own ripping?—Even in cases where they do their own ripping.

35258. You have expressed an opinion as to who was the best judge of where timber should be put in the working face, whether it should be a man who has taken out the coal or a person specially appointed for that purpose by the employer. In some parts of the country the employer appoints a special timbering man for timbering at the working place. That is so in a limited part of Great Britain. In other parts it is included in the ton rate to do their own timbering. Do you say that the men at the coal face are the best judges of when and where timbering should be put up?—I certainly think so. That is my own expereince. I had 22 years at the coal face and I think that the man who is working, no matter what the colliery or seam is, should be the determining factor as to what timber is required.

35259. He would be a better judge as to the danger than a fireman who comes round the face twice a day?—I think so.

35260. A person specially appointed for that purpose and devoting his whole time to timbering at the face would ultimately come to be as good a man as the man taking out the coal, if he devoted his whole time to the work?—No doubt.

35261. He would have the same danger as the person taking out coal?—Yes. I think the workman should be allowed to have discretion.

35262. That has been put once or twice, If that is so, and the person at the working face, because of his long experience at the face and seeing the dangers round him, is the best judge, then you do not think it fair or right that some person outside the fireman, or someone else, should tell him to take out timber set for his own safety?—I do not think they should tell a man he should take it out. If they say a stick was necessary they should have some right to instruct the man to put it up, but I do not think they should tell a man to knock it out or that it should be taken out.

35263. If there is no limitation on the miners at the face to set timber so far as the face is concerned for their own safety?—Not in the least.

35264. They are expected to do so?—If they do not do so they are prosecuted.

35265. In addition to that they are expected to stand a prop at any point which the fireman may instruct them?—In addition to that they have to do so.

35266. (*Chairman.*) Do you wish to add anything more?—No, I do not wish to say anything more.

MR. HUBERT JENKINS, called and examined.

Mr. H. Jenkins.

35267. (*Mr. Wm. Abraham.*) Do you agree with the former witnesses generally with regard to their statements as to what they consider necessary to strengthen the law to reduce accidents?—Yes, generally speaking, I do.

35268. It is no good taking it again line by line, but probably you have something from your own districts you would like to emphasise. Will you kindly state that to us?

(*Mr. Ratcliffe Ellis.*) What is his district?

35269. (*Mr. Wm. Abraham.*) You are miners' agent for the East Glamorgan District?—Yes.

35270. How many years have you been a practical miner?—I have had 22 years of underground work.

35271. Were you appointed agent a few years ago?—I was a checkweigher for two years and three months, and I have been appointed a miners' agent for nearly three years.

35272. Will you state to the Commission in your own way anything you want to add as emphasis to the evidence given? Is there anything you want to enlarge upon, or is there any new point you want to make? We are under a disadvantage through not having had your proof.—I understand that. To begin with, I would like to say I agree with those who have tendered evidence as regards the abolition of fines inflicted by the managers for breaches of the Coal Mines Act. I certainly think if in every case the offender was prosecuted it would have a strong moral effect on the rest of the workmen.

35273. With regard to the inspection of the mine by the workmen, what is your opinion?—My experience has taught me that there is a general reluctance on the part of a large number of the workmen. They feel somewhat reluctant in accepting that duty because of a fear of consequences, whether they are justified or not is questionable in many cases, but still they have that fear of consequences in case they should have to present an unfavourable report.

35274. With regard to the third class of inspectors suggested, what do you say to that?—I think that there certainly should be a third class of inspectors appointed—what we may term workmen-inspectors—and that they should possess a practical and thorough knowledge of working in the mines, and that this may be supplemented with a certificate of competency, preference to be given to those, of course, who would obtain such a certificate.

35275. In your opinion, in addition to a man being a thoroughly practical, experienced miner, if he possesses a certificate of competency, that would add to his qualifications?—Yes.

35276. Is it within your knowledge that you have a certain number of men in all the districts in South Wales who hold certificates?—Yes, that is so.

35277. With regard to systematic timbering, what is your opinion about that as a practical miner?—My experience has taught me that a large number of accidents which now happen could be avoided if a systematic method of timbering was adopted.

35278. You do not mean that the same distance should be stipulated in every colliery and every district throughout the country?—Certainly not.

35279. But that a manager or some of his experienced workmen, after careful observation, should state a certain distance to be the rule for that place?—Yes, that is my view entirely.

35280. You believe if that were done that a certain number of accidents which now happen because of want of timbering would not occur?—Yes.

35281. That is your honest opinion?—That is so.

35282. You believe that it will strengthen the Act and reduce the number of accidents if a similar stipulation is placed upon the putting of timber in the roadways and the travelling roads, such as there is now in the face?—Yes.

35283. Do you know as a fact that, notwithstanding we were at one time opposed to it, the stipulation made by law in the face has been the means of reducing the number of accidents?—I believe it has.

35284. There again you have no hesitation about giving your opinion?—Not the least.

35285. You believe if a similar stipulation is made according to the necessities of the strata and so forth—if it is made compulsory that timber should be placed at that distance—that would have the same result, and reduce accidents as it has already done in the face?—I agree.

35286. (*Chairman.*) I see that you object to General Rule 22. You say General Rule 22 should be amended so that there should be provided at the working place more than the amount of suitable timber required for the one day's use. I do not understand that Rule 22 limits the timber to be provided to the timber which might be reasonably required for one day's use. The Rule is "Where the timbering of the working places is done by the workmen employed therein suitable timber should be provided." It does not say anything about only for one day's use. Your point is that every now and then there may be a special

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call for timber beyond what is likely to be required for one day and to meet that there ought to be a special reserve of timber?—Yes.

(*Mr. Ratcliffe Ellis.*) May I refer to the Special Rule in the South Wales District, 10 and 11: "A supply of suitable timber reasonably sufficient for the work that is being done shall be kept either at each man's working place where mineral is being gotten or at the nearest point thereto that is reasonably practicable."

35287. (*Chairman.*) You think that rule which has been read out is not strong enough?—Yes. You explain my view exactly. You have taken a right conception of what I mean.

35288. There should not only be enough wood reasonably supposed to be sufficient for the day, but also a reserve of wood in case of an emergency?—Yes.

35289. There is also another suggestion which you make. You say, "If a double means of coupling were adopted in all kinds of haulage where more than one tram or tub is drawn at the same time a large number of accidents would be prevented." What do you mean by "a double means of coupling?" Do you mean they should not be dependent upon one coupling, but that there should be a double coupling to every tub?—That is what I mean. If one broke, the other would prevent the trams running backwards.

35290. A side chain or an over chain or something of that kind?—Yes.

35291. (*Sir Lindsay Wood.*) You say that the fines should in all cases be abolished, and that every offender should be prosecuted?—Yes.

35292. However trivial the cause might be?—Yes, I believe in prosecution.

35293. Is that the opinion of the workmen generally in your district?—It may not be the opinion of the workmen, because certainly they have a feeling of reluctance to appear in a police court; but for the purpose of maintaining discipline I think that there should not be too much weight given to the feelings of the workmen. I believe if prosecution was insisted upon it would exercise such an influence on the other workmen that these breaches of the Act would be a rarity—not so common.

35294. (*Mr. Smillie.*) You mean it may not be the opinion of the particular workman who was found guilty of a breach, but that is the general feeling of the miners in South Wales?—I believe that the general opinion of the workmen, taken as a whole, is in favour of the abolition of fines.

35295. (*Sir Lindsay Wood.*) Those are rather strong measures?—That is my honest belief.

35296. There may be faults committed of a slight character by no means tending to the unsafety of the mine or the workmen which may be small breaches of the rules, or anything of that sort, which must be checked, but prosecution means both a heavy fine and a heavy loss of work?—Yes, and the dread of such would influence the men so that they would be more keen to avoid committing breaches of the Act.

35297. You said, in your opinion, that there should be third-class workmen inspectors?—Yes.

35298. Are those to be under the charge of the Government?—Certainly.

35299. Appointed by the Government?—Yes.

35300. How many would you propose should be appointed?—It is somewhat difficult to suggest the actual number required, because due regard would have to be given to the circumstances of different districts. In some districts the collieries are situated closely together and in other districts they are large distances apart; and, again, there are some collieries which are very large and others which are very small. All these circumstances would have to be taken into consideration, and by experience we would have to find out the exact number required. I think a sufficient number should be appointed by which these inspections could be taken at least three or four times a year.

35301. Inspection by these workmen?—By these workmen inspectors.

35302. Of each colliery?—Yes.

35303. You mean the entire colliery?—The whole of the workings in each colliery.

35304. Two or three times a year?—Three or four times a year.

35305. That would entail a large number?—Undoubtedly it would.

35306. I assume you mean that these inspectors would be under the chief inspector?—Certainly, I agree with what has been suggested.

35307. Did you mean three or four inspections should be made in addition to the inspections by the general inspector?—Yes.

35308. There would be considerably more than three or four inspections?—These workmen inspectors, we may term them should inspect the whole colliery workings at least three or four times in the year.

35309. And report to the head inspector?—Yes.

35310. In addition to any inspection he might think proper to make himself?—Yes.

35311. (*Chairman.*) Or the assistant inspector?—Yes.

35312. (*Mr. Ratcliffe Ellis.*) I do not understand your view about systematic timbering. Is it that there should be a maximum distance prescribed in the mine by the manager?—Yes, I think the workmen should be consulted as well.

35313. That is the point. The rule at present in your district is this: "Where timber is used to support the roof, the owner, agent, or manager, shall keep posted up at the mine a notice specifying for each seam or district of a seam the maximum distance apart at which props or other roof supports at the working faces where persons are employed in getting and filling minerals are to be set." That obliges the manager now to prescribe the distances at the working face?—Yes.

35314. That is systematic timbering?—Yes.

35315. You say the manager should not have a right to do that?—No.

35316. You say a manager should not have that right, but that the manager and the workmen should decide that?—Yes.

35317. What workmen?—His own workmen.

35318. Each man working in the face is to prescribe with the management what distance apart these props should be?—I should say he should consult the workmen's committee. That would be representative of the whole body of workmen.

35319. There might be differences in these working places?—Certainly.

35320. The same distance would not do throughout the pit. How is it going to be carried out and worked? When this consultation takes place is it to be every day?—Certainly not.

35321. He has to prescribe a notice specifying the maximum distance at the mine?—This should be done before framing special rules.

35322. This rule is framed and has to be carried out. I want to see how it is to be carried out. If the manager is not entitled to please himself he can only do it after the men and he have agreed. If the men and he do not agree what is to happen?—An arbitrator should be called in.

35323. In each of these cases your view is that the manager, before he prescribes the distance in each working place, must consult with some committee of his workmen as to what the distance should be, and if they fail to agree it must be referred to arbitration?—Yes.

35324. Do you think it is possible to carry on the working of a mine with an arrangement of that sort?—Certainly I do, or I would not suggest it.

35325. Whilst this is all being discussed, and you are going to arbitration—a lawyer's experience of arbitration is that it is not done in a few minutes—if an accident happens in the meantime, who is responsible?—The management, certainly.

35326. And still you do not give the manager the right to say where he thinks the props are necessary?—I have maintained that the workman should exercise his discretion as to when timber is necessary.

35327. You would exclude the manager from any voice in it, but still you would leave the management responsible?—I should certainly hold the management responsible if they refused to allow the workman to exercise his discretion.

35328. If the workman is to please himself what timber he puts up and where he puts it, and the manager has nothing to do with it, and an accident happens, would

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you leave the management responsible for the consequences by being liable for penalties under the Act, and the employer liable under the Workmen's Compensation Act?—Yes.

35329. Who is to be responsible whilst this discussion is going on?—The same party that is responsible now.

35330. (*Mr. Smillie.*) Special Rule 50 provides that the overman "shall direct the colliers and other persons employed in the mine properly to stow away all rubbish produced in their stalls and working places, and to remove all loose overhanging stones or coal in the roof and sides, and to put up all necessary sprags, props, walls and gobbing, to make their working places safe." That is, the overman is to have power to order all persons under him to do that. Special Rule 67 gives the fireman the same power, and says that the workmen must be under his charge, and must obey his orders, and put up all sprags and props where he orders them to do so at the working face. Those are the special rules now?—Yes.

(*Mr. Ratcliffe Ellis.*) And there is the timbering rule too.

35331. (*Mr. Smillie.*) The systematic timbering rules are the rules which you were discussing just now?—Yes.

35332. Your point was, before systematic timbering rules as to distance between props or crowns should be fixed that the workmen should be consulted?—Yes.

35333. If management and workmen fail to agree arbitration might be resorted to?—Yes.

35334. In the meantime, if an accident takes place from want of systematic timbering who is to be held, responsible? You answered that the manager was to be, because the fireman or overman may during that time order that person to put up props wherever he cares to.

(*Mr. Ratcliffe Ellis.*) He can go to arbitration whether he may or not.

(*Mr. Smillie.*) Special Rules 50 and 67 are not suspended because you go to arbitration.

35335. (*Mr. Wm. Abraham.*) Is it not a fact that all rules are always in force until new rules are agreed upon?—Yes.

35336. (*Mr. Ratcliffe Ellis.*) The systematic timbering is to be suspended?—No.

35337. (*Mr. Smillie.*) It is just as well to get this out of the witness. While claiming that the workmen should have some voice in the fixing of the distance, and that they should be entitled to go to arbitration if they cannot agree with the owners, you are willing that the present systematic timbering rules should continue in force until new rules are established?—Yes; I have not proposed to suspend any rule in force.

35338. We are anxious to extend what is now systematic timbering at the face to the main roads?—Yes. There is one point I should like to emphasise, and that is with regard to the employment of unskilled labour. I certainly think that something should be done to prevent an unskilled workman being allowed to take charge of a working face by himself, or being allowed to take charge until he has sufficient experience.

35339. (*Mr. Wm. Abraham.*) That is the law now?—But we want to go further and adopt some method in order to prevent an infringement of the law. I am not blaming the colliery manager for the moment, but a case recently came under my notice where a man was employed to fill coal by night. He was one of those men whom in South Wales we call a "sponger," and he met with his death, and I have reason to believe that he was not a collier from what I have heard since the inquest.

35340. (*Chairman.*) And yet he was in charge of a working face?—Yes.

35341. Alone, by himself?—Yes; he was allowed to cut coal by himself.

35342. Why did you not tell the inspector this, and ask him to prosecute?—What I say is this. The evidence I am giving now is hearsay, and it would be somewhat difficult to get to the bottom of it. This man was reputed to be a quarryman some years ago when working in our neighbourhood before. He came to the colliery and represented that he had recently left another colliery.

35343. (*Mr. Wm. Abraham.*) You think there ought to be some system of finding out whether men are colliers or not?—That is what I mean.

35344. (*Mr. Smillie.*) Was there an inquest held in this case?—Yes.

35345. Did you attend?—I did.

35346. Did you bring out whether General Rule 39 had been carried out? Did you endeavour to bring that out?—At this particular inquest it happens that the coroner there has refused me permission to put a question. I have had to stand down when asking permission to put a question to a witness; consequently I have not attempted to obtain that permission since when attending an inquest over which this coroner holds jurisdiction.

35347. Was the Inspector of Mines at that inquest?—Yes.

35348. Did he endeavour to bring out the facts as to whether this person had been previously employed?—No. Of course it was taken for granted that he was a skilled workman.

35349. Had you the information previous to going to the inquest?—No.

35350. Your suspicions regarding the matter had not been aroused previous to that?—No.

35351. This is one case only which you know of?—No. At the same inquest a workman gave evidence who, when questioned as to the nature of the roof, could not answer and say what was the nature of the roof, whether it was cliff, rock, or what it was.

35352. Was there any person working with this man who was killed?—No.

35353. Was he working alone?—Yes. This other one was working in a place, too.

35354. (*Mr. Wm. Abraham.*) That is one case. Do you think during the last few years that the managers in South Wales are keener about the quality of men they engage as a rule?—I want to make that point clear. I do not attribute any blame to any colliery manager. I think they are as careful as we can expect them to be; but it is possible for a workman to misrepresent himself to the manager, and I think something should be done to make the man produce proof that he has worked at the face for two years, in accordance with the law.

35355. (*Mr. Smillie.*) A manager may be misled by a person saying that he has worked two years at the face?—Yes.

35356. From the timbering rule Mr. Ellis quoted down a certain distance. Have there been any alterations in these systematic timbering rules as to distances since they were established in 1902? Has there been any alteration posted in your district since?—I could not say.

35357. It is not likely every second or third day, or every other week, that the manager will post up new distances as to timber?—No.

35358. The last part of Rule (A) says: "Provided that nothing in this rule shall prevent the setting of timber where it is required in the interests of safety at a distance other than that specified in the notice." That is, the miner shall have the right, in addition to systematic timbering, to set his timber where, in the interest of safety, it is required?—Yes.

35359. It says nothing shall prevent him doing it, but in the face of this rule the fireman claims the right to take out his timber where he thinks he has set it for his own safety?—Unfortunately that is so.

35360. You strongly object to that?—Yes.

35361. Who would be responsible, supposing a miner set a pair of timbers which he thought was required at the gate end, and the fireman knocked them out, and a fall took place afterwards by which a boy or a man was killed? Would the fireman be held responsible for the death of the man?—No, the management would be held responsible for it.

35362. In compensation?—Yes.

35363. He would not be charged with manslaughter?—A case like that has not come under my notice. I think that would be a very strong case.

35364. If you had a case of that kind you would be likely to try and get a case raised against the fireman?—Certainly.

35365. (*Chairman.*) Do you wish to say anything more?—Yes. With regard to the stowing of small coal in the gob or waste, I hold the opinion that the coal as gotten should be sent out. I know one particular colliery where there are thousands of tons of small coal being thrown into the gob or waste, and at the same time a huge rubbish heap is to be seen at the colliery. If the small coal was sent out and the rubbish kept in it would tend to prevent accidents, because it would make a firmer gob than small

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coal. Small coal will not support the roof when a heavy squeeze comes on.

35366. (*Mr. Ratcliffe Ellis.*) If the small coal was sent out they would be paid for it?—They are not paid at that colliery.

35367. They would be paid for it?—Not under the present arrangement.

35368. They are clearly not entitled to be paid for it?—They would not be paid under the present arrangement.

35369. You think that the present arrangement is not quite fair, and that they ought to be paid for it?—Certainly.

35370. There is no question of being paid for the dirt that comes out. This small coal is of very little use when it is brought out?—It is a very valuable commodity on the market to-day. *Mr. H. Jenkins.* 13 Dec., 1907

(*Mr. Ratcliffe Ellis.*) Then it is very extraordinary why it is left inside.

35371. (*Mr. Smillie.*) Was it because of the payment point of view you advocated it should go out?—No, because I believe it would tend to prevent or reduce the possibility, especially in places where the workman has to work in wet places, of spontaneous combustion occurring because of the stowing of the small coal in the gob.

FORTY-NINTH DAY.

Wednesday, 22nd January, 1908.

PRESENT:

Lord MONKSWELL (*Chairman*).

Sir LINDSAY WOOD, Bart.
H. H. S. CUNYNGHAME, Esq., C.B.
WM. ABRAHAM, Esq., M.P. (Rhondda).
ENOCH EDWARDS, Esq., M.P.
THOMAS RATCLIFFE ELLIS, Esq.
JOHN SCOTT HALDANE, Esq., F.R.S.
ROBERT SMILLIE, Esq.
S. W. HARRIS, Esq. (*Secretary*).

Mr. JOHN WILSON, M.P., called and examined.

35372. (*Chairman.*) I understand you have not prepared any Statement to put before us, but you desire that we should ask you any questions we think desirable?—That is so. *Mr. J. Wilson, M.P.* 22 Jan., 1908.

35373. Witnesses on behalf of the Miners' representatives have been examined here on the basis of certain questions which have been drawn up to a great extent, I believe, by Mr. Edwards. I propose to take you through those questions drawn up by the Miners' representatives so that you may know on what points we desire to hear evidence. First of all, there is the Government inspection. What are your views as to whether it is desirable there should be more inspectors?—I think it is essential and necessary there should be more Government inspectors.

35374. How many more?—I would not go so far as to say; neither would I like to be understood as making any complaint in any way at all. The county which I represent has 311 collieries, I think, in it, and has underground about 104,000 people. There are, I think, six inspectors in the North of England to cover Durham, Northumberland, Cumberland and North Yorkshire. For proper inspection I think that is too much for six men—if inspection has to be inspection.

35375. What do you consider ought to be the theory of the Government inspection. Do you consider every mine, for instance, ought to be visited all through, say, once a year or once in six months, or once in three months, or do you consider sample inspection is sufficient?—I think they ought to be properly inspected and the men should have a proper round. I would not fix a time or a period when they should inspect I do not think it is proper inspection when men have just to wait until they are sent for, but I think there should be a sort of circuit for each inspector, and he should visit the collieries within proper times.

35376. Is not every colliery visited by either an inspector or an assistant inspector at least once a year?—I cannot say whether he inspects them once a year or not.

35377. We have had statistics about it. They have to give a report in every year to the Home Office showing what inspections are made, and in most of the districts we find that nearly the whole of the mines have been more or less inspected in the course of the year, sometimes only by sample, and in other cases right through the mine?—I do not see how they could inspect mines by sample.

35378. You do not think it is any good for a man to go down a mine and see a bit of it?—No.

35379. You think he ought to see the whole of it?—Yes. Looking to the number of accidents and the classes of them, I think they all want closer scrutiny and inspection of the roofs and sides.

35380. By the fireman?—By whatever inspector it may be. It is not sufficient, I think, for six men to inspect all the collieries in the North of England, taking our part as a type. We have 311 collieries in Durham; one-third of that number, speaking roundly, in Cumberland and the whole of Northumberland and the North Riding of Yorkshire.

35381. Have you considered what number of inspectors would be necessary in your district to carry out your views?—I have not.

35382. Probably twice as many as at present?—I should have, perhaps, a different class of inspector.

35383. Would you have a third class?—Yes.

35384. Would you have a considerable number of them?—I would have a sufficient number to properly and safely inspect the mines. I have not gone into the question of the mathematical number.

35385. What sort of pay do you think you ought to give to them in order to get reasonably good men, competent to do the work?—I think if you had the men paid pretty much like the officials are paid at the collieries, you would get a class of men who would be competent to make it their particular and special work to look after the safety of the mines.

35386. They have very much that class of men in Germany, and they pay them about £3 a week to begin with. Would that be about your idea?—I think that would be a very fair wage, and you would get a good class of man for that.

35387. Would you consider the third class inspector should be a class by itself, or would it be men who have risen and made themselves competent to do that work?

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Mr. J. Wilson, M.P.

22 Jan., 1908.

—I do not think I would stand in the way of their doing that. If a man in the lower grade showed himself competent and qualified, I do not see why he should not rise to a higher grade.

35388. What sort of examination would you put these men through?—There are hundreds of men in the county of Durham holding first-class certificates working every day, and a number doing deputy work and coal hewing. They are competent to examine a mine.

35389. Would you suggest it should be made a *sine qua non* that only these men holding first or second-class certificates should be appointed?—I think they should be shown to be competent, and I should think for inspecting a mine a second-class certificate would be sufficient.

35390. You think the third class of inspector should be qualified if he had a first or second-class certificate?—Yes. I think men should show their qualification, and it would be an impetus towards the education of men, because they would educate themselves with a greater hope of success.

35391. Would you suggest some sort of special examination?—Is not the present second-class certificate sufficient for a man to manage a mine? It entitles him to an under-manager's place.

35392. (*Mr. Ratcliffe Ellis.*) Of course an under-manager is under the supervision of the manager?—He has the sole charge of the mine while the head manager is not there, and if a second-class certificate is sufficient for that, surely it is sufficient for him to examine a mine.

35393. He does not take charge?—While the head manager is not there, he is the sole responsible person in the mine.

35394. Yes, but the manager is responsible?—But he is not always in the mine, and the under-manager is more frequently in the mine than the head manager. He is the practical over-looker of the mine. My point is this, that whatever qualifies a man to take that responsible position qualifies him for examining a mine.

35395. (*Chairman.*) You consider that these men whom you would like to be appointed as a third class of mining inspector should be qualified by having either an ordinary first or second-class certificate?—Yes. I would not like to say every man should be chosen regardless of his fitness.

35396. Would you insist upon his having five years' experience underground or some such experience?—I think so. I think he should be a practical working man. I would not take a man out of a school and set him to examine a mine.

35397. Need he be a practical man at the time of his appointment. Would it be sufficient if some years ago he had worked underground for a period, say, of five years?—And then left the mine?

35398. Yes. Supposing he had left the mine and set up a shop, for instance, and he was taken back again into the mine?—That, speaking broadly, would not be an objection if the man had had the experience previously. Take myself; I have been out of a mine for more than five years, but I think I could examine a mine.

35399. You say a man to be appointed must have got either a first or second-class certificate, and in addition to that, he must have had considerable experience underground some time in his life?—I think so. I would not say a man could examine a mine by theory, because it means a practical experience of a mine to examine properly.

35400. Let me ask you with regard to other forms of inspection. Take first inspection by the men under General Rule 38. In Durham, according to Mr. Bain's evidence, inspection under General Rule 38 is very much in vogue?—It is not practised as largely as it ought to be.

35401. How often do you suppose inspection takes place on an average?—I think it depends pretty much on the colliery. Sometimes they go round once in three months, and sometimes once in six months.

35402. Sometimes they do not have any inspection at all?—Sometimes, I think, some mines are not inspected.

35403. Do you consider under General Rule 38 the men should inspect once a month as they are allowed to do?—I think they should.

35404. Even in your district, where this inspection under Rule 38 is carried out much more thoroughly than apparently it is in other parts of the kingdom, you think there is room for improvement?—I think the improvement should be within the provisions of the 38th Rule—that men should take advantage of that.

35405. Whom should the men be allowed to appoint? Should the choice be restricted to men working in the same pit?—When this Coal Mines Regulation Act was under discussion, I objected to the words in the 38th Rule. I felt it was restricting it too much, when the present tense was used: "Who are practical miners." I think it ought to be broadened; even if a man was not working in the mine for the time being, but had been a practical working miner.

35406. There is a third point, as to whether the power of the men should be restricted to the power of appointing someone working in the same pit, or whether they should be allowed, if they liked, to choose someone outside?—I could not imagine such a case. It would be a queer thing if we had not a man who was fit and whom the men did not think was competent to examine his own mine.

35407. It is suggested there have been such cases?—I do not know a case. We have men at every pit able enough to inspect the pits and we would never bring in a man from other collieries. I cannot speak for other counties, I am speaking for myself.

35408. We have had a great deal of evidence as to the duties and responsibilities and the appointment of firemen. The general complaint was, in the first place, that the districts were in many cases too large, and it was impossible for the firemen to get round his district and do justice to it—and, in the second place, they complain that the firemen were in the habit of being told off by the management to do other duties than looking after the safety of the men—that they had, for instance, to see the way in which the mine was worked, that there was no waste and so on, and in general that they had the duties of management put upon them in addition to looking after the men's safety, and they thought that was very undesirable. In the third place, there was a good deal of complaint as to the appointment of the firemen, that they were very often appointed not because they were the best men to look after the safety of the men, but because they were, to put it in the language of one witness, good slave drivers, and they could get a good deal of work out of the men?—With us, the latter portion would hardly apply. It might apply where there was a sort of "buttyism"—sub-contracting—but in the North deputies are appointed whose ostensible work is to look after the safety of the men as well as the proper working of the district over which they are set.

35409. Do you think that is a proper thing to do, to combine the functions of safety and the functions of management?—In many cases I think the deputies have too wide an area to look after, too many men and too many places, to carefully examine the places as they ought to do.

35410. Some of the men declared it was perfectly impossible that the fireman could go through all the gates leading up to the working places?—Take the time to be an hour between his going in to examine and the coal hewer going in—I do not think it is possible, speaking on the average of the distance of the station from the face, for a man who might have 13 or 14 or 15 gates or places to properly examine in accordance with the requirements of the Act. He should examine all the sides and roofs and all the places the men have to go through. Speaking now for the North of England, Durham and Northumberland, and what I would call an average number of places, I do not think it is possible for a man in the time to properly examine that distance.

35411. Are all the districts too great, in your opinion?—I would not like to say all. I suggest that, of course, as a means of safety.

35412. You said just now that the deputies have not only to look after the safety of the men, but they have to some extent to have regard to the management of the mine?—In the district over which the deputy is set he is the first man to which an application is made if anything happens. For instance, if a boy's wagon or tub gets off the way and he cannot manage to put it back by himself, the deputy is the man he applies to. Likewise in the case of setting timber and attending to brattices and doors, and looking after the places, he is the first man to be applied to. It is all right with regard to the face examination, but what time has he to give to the sides, according to the wording of the Act?

35413. You think the duties placed upon the deputies are too multifarious. Brattices, no doubt, you would consider he should attend to?—That depends upon the relation of his work to his time—whether he has too many men or too many gates or places. It is possible

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to keep the number of places within the compass of a man's work and time so that he can look after all of them.

35414. Ought he to be the person to look after the filling of the tubs, to see, for instance, that not too much small coal is put in?—The deputy with us never interferes with that.

35415. You consider in Durham the functions of the deputy are what they ought to be?—Exactly, if you bear in mind what I am saying, that he should not have too many places.

35416. He ought to have a district that he should be thoroughly capable of inspecting from end to end?—Yes.

35417. Complaints have been made to us before now by the Miners' Federation that the deputies have different work to perform to the work they ought to perform?—You see customs differ very much. Speaking now for Durham, with its own peculiarities, and Northumberland, if he had not too many men he might do it properly. The work he has to do so far as we are concerned, is deputies' work, and he has not time to inspect, according to the requirements of this Act, the sides and the roof. I take it one-half of the accidents in the country arise from falls of roof and sides. I would like to say I have no complaint whatever to make against our deputies and the work they do; I am only speaking from my own observation that they have too many men to attend to to carry out the proper safety of the mine in many cases.

35418. As a general rule you consider the deputies are the proper men to perform those duties and that the best men are generally selected for the purpose?—I have known cases where "my cousin" got a place and someone else should have had it. I was never chosen to be a deputy: I was never considered capable enough to be a deputy, but we have all our "cousins," I suppose.

35419. I will now come to discipline and its enforcement by fining or prosecution. Many of the men who gave evidence before us thought that the system of fining was too frequently put in force, and it would be much better if there were more prosecutions?—You mean fining by the manager.

35420. Yes.—I do not know whether it is our peculiarity, but we do not permit that: we fight against that, and we think the magistrates should decide.

35421. You fight against fines altogether?—We object to fines being imposed at the dictum of the manager. But I do say this, that every breach of discipline, every violation of Special Rules or Act of Parliament, should, for the safety of the men as well as the manager and employers, be punished.

35422. Even in the case of a small breach of discipline?—That would depend upon its merit.

35423. In every case where a reprimand is not sufficient you think the man should be sent before a magistrate?—Yes. I think there were nearly 100 prosecutions last year in the southern part of Durham—indeed, I have the list before me.

35424. The men who came before us were certainly more in favour of prosecutions than fining, and I think a great many would agree that fining should be almost totally abolished: but at the same time Mr. Bain, your inspector, holds a different view upon that. He says with regard to that: "Men very much dislike being prosecuted, and it creates friction in other ways: they would accept the punishment of a fine of a larger amount than would be inflicted by the magistrates of the district"—by the manager, he means. You do not agree with that?—I respect Mr. Bain's opinion; but I claim that I know more about the wishes of the men than he does.

35425. Your opinion is that the men would prefer to be prosecuted?—I say this, that they would object to the manager having the magisterial function to fine them as he thought fit.

35426. I suppose there might be very insignificant breaches of discipline that might possibly be met by a small fine?—I need not say that the insignificance of a thing would lie with the observation of the man who had to impose the fine. If you once say he can start to do it, logically you cannot stop.

35427. The men could always object?—Yes, but the law is made to punish. The magistrate is there, and the summary courts are there to punish a man if he breaks the Rules. We had 75 prosecutions in the south part of Durham in 1906, according to Mr. Bain, and the amount of the fines and the number of them are given in Mr. Bain's report.

35428. Will you tell me the number of fines?—There were six contraventions of rules about safety lamps, the amount of the penalty being £2 3s. 6d., and costs £3 12s.

35429. That was prosecutions?—Yes.

35430. Not fines?—I am not speaking of the fines.

35431. Are there no instances of Durham miners being fined by the management?—They are unknown to me.

35432. I will refer you to Mr. Bain's evidence, *Q.* 6,635: "Although your prosecutions of the managers are rare, prosecutions by the managers are fairly frequent in your district?—*A*: That is so. I can give a few figures with regard to some of the larger collieries. At one colliery there were 108 persons fined last year, the aggregate amount of fines being £24 9s. 8d.: at another colliery, 37 persons fined: at another, 63: another, 18: then 11, 11, 45, and 48. One large colliery does not fine at all, it always prosecutes"?—There were 75 prosecutions, according to Mr. Bain, in South Durham in 1906.

35433. Were they fined by the management?—Does he say that 108 persons at one colliery were fined last year by the manager?

35434. He does say that.—When he says "last year" I suppose he means 1905.

35435. At all events there are fines by the management sometimes?—If it is done it is unknown to me. My colleague is here, and I say in his presence I do not know of a single instance. I do not say there would not be such fines, but I do not know of them; and I say now, collectively, the men object to being fined.

35436. What do you say with regard to the system of establishing Special Rules?—I think the system wants altering.

35437. In what respect?—I do not think it should lie with the manager and the owner to establish Special Rules themselves. Here let me observe that what I am now going to say is the practice in the County of Durham.

35438. As regards the County of Durham the system which you explain commends itself to you?—Yes.

35439. You consider if that system was made general that would be sufficient?—Yes. When a Special Rule is to be introduced—I am now speaking in the presence of the chairman of the Durham coal trade—the workmen and the mines inspector and the employers all meet and discuss it. I am safe in saying in 1887, I think, we had a very large number of meetings before the Special Rules were agreed to. Of course the owners drew them up themselves and submitted them to us and to the mines inspector, and we met and discussed them. In my opinion that ought to be the law. I have heard about other counties, but I do not know what the practice is in other counties. I recommend that the men should be taken into a sort of partnership at once, through their representatives.

35440. In Durham do the men ever suggest to the management any Special Rules?—I cannot remember an instance since 1887 where there has been any suggestion from the workmen as to the alteration of Special Rules.

35441. (*Sir Lindsay Wood.*) But during the discussion were there any Rules suggested by the men?—Yes, many alterations.

35442. (*Chairman.*) But the men never take the initiative in suggesting any rules?—We brought forward amendments.

35443. Do the men ever make the suggestion first to the management?—So far as my memory will serve me, in 1887 (I was one of the Committee) the Rules were submitted to us as framed by the owners, and then the mines inspectors and ourselves and the owners met, and amendments were proposed by us and accepted.

35444. Do the men ever take the initiative? It would be competent for them to do so if they liked. Supposing they thought it was desirable that certain Special Rules should be adopted in their district, it would be quite open to them to approach the management with a view to getting those Special Rules adopted?—Yes, and I do not mind going further and saying that if the Association of which we are Secretaries were to say that they want an amendment of Special Rules, if requested a meeting would be convened for that purpose.

35445. Supposing your Association wanted a change in the Special Rules, they would go before the owners?—If I sent in a request to the owners I do not think the owners would object to appoint a meeting to discuss a Special Rule.

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35446. With regard to accidents, taking first the falls of roof and sides, in Durham you have, as I understand it, a system by which the deputies set the timbers?—Yes.

35447. You consider that is a good system?—We do.

35448. In some parts of the kingdom the hewers are principally responsible for that?—I guard myself about the deputies with the little objection that I might have as to their having too many men to attend to. Many a time when he has too many he cuts the timber, and puts the right lengths of timber required, and then the men set the timber themselves while he is away. If he had not too many men, and perhaps too much work, he might pay a little more attention to the setting of the timber: I speak from my own experience: I would much sooner set the timber myself than allow the deputy to set it, because I could suit my work—although all men have not that knowledge.

35449. I suppose a deputy would very soon get to know what men could be trusted to set timber, and what men could not?—I do not know. I think sometimes he would have to run more often than he does. I know many times men will run themselves into danger for the desire to make money if they have to set their own timber—there is a possibility of men risking too much, especially towards the end of the shift, or if they have not very much time to do it.

35450. Have you any opinion as to the question of systematic timbering: that there should be certain rules adopted whereby timber should be put up at nor more than certain intervals, even although the roof might appear to be good?—I could not make any objection beyond this; the strata of stone differ very much, and that guards against the danger of the eagerness to make money. There are two things with regard to coal-getters which oftentime lead to accident: first, familiarity—"familiarity breeds contempt," and leads them to look upon things in a casual manner. The second is the man's eagerness to make money, and when it gets towards the end of the shift he will run a risk rather than stop, in order to make money at his work. I would like to read a portion of Mr. Bain's Report, if you will allow me, anent this question, which struck me as being very *a propos*. Dealing with the falls of roofs and sides causing accident, at page 15 of Mr. Bain's 1906 Report, he says: "During the year there were 65 fatal accidents from falls of roof and side causing the deaths of 68 persons. Thirty-five were caused from falls of roof and two from falls of side in the working places; 17 on roads; seven whilst drawing timber, and three when otherwise working or passing, and one in a shaft. Fifty-five of these fatal accidents occurred in the coal mines of Durham, and 10 in the ironstone mines of Cleveland." Now mark the next paragraph: "The number of fatal accidents from falls during the year is very excessive, and I have difficulty in ascribing any cause. It is a fact that now there are many more thin seams being worked than formerly, and it is very probable that—other things being equal—a man has a very much lessened chance of escape from a falling roof in a thin seam than he has in a thick seam. In a thin seam he has to work in a very restricted area—often lying at full length on his side. In such cases any slight warning that may be given is of little avail, as the man in so limited a space is unable to move himself instantly from the threatened danger; whereas in a thick seam he can do so. The difference of the chances of escape may be readily conceived—in the one case a man on his feet nimble and alert in the other a man cramped up lying on his side—alert enough, but anything other than nimble." That strengthens my idea that those who set timber, the deputies in the North of England or elsewhere, ought to have more time in the thinner seams than in the thicker ones. We all know that Mr. Bain is cautious, and does not make a statement wildly. While the seams are getting thinner it is necessary that more time should be given to setting the timber.

35451. How about accidents from haulage?—I would suggest that although there are refuge holes in the engine planes, as endless ropes or endless chains are now being adopted rather more than they have been, there should be a separate travelling way driven parallel with the wagon-way. Endless chains are very dangerous. The men take risks again and again in coming out or going in, and they oft-times get themselves caught in the tubs. It is the same with the refuge holes. According to what we have heard in investigating cases under the Workmen's Compensation Act, it appears that numbers of men get caught in running from one refuge hole to the other; they do not do it wilfully, but they think they can do it safely. If a place were kept as a separate travelling way to get along, apart from the engine plane altogether, I think it would conduce to safety.

35452. You would not consider it sufficient to have a gangway made?—That increases the danger itself in the roof; there would be such a wide expanse.

35453. I suppose in some cases the expense of having a separate travelling road would be almost prohibitive?—If you wanted to make a wagon-way wide enough for men to be safe, there would be just as much expense to keep that up as a separate travelling way.

35454. You think it would be very much the same expense and you could just as well make a separate road?—It would be a great deal safer, in my opinion.

35455. Perhaps you suggest that that should be made compulsory in the case of opening up new collieries?—It could be more easily adapted to new collieries than old ones.

35456. We have had a great many cage accidents lately. Have you anything to say about those?—No.

35457. Is there any other form of accident you would like to speak about?—I think not.

35458. With regard to the use of safety-lamps, do you consider that safety-lamps are sufficiently used in your district?—I think they are. I do not know of any case hardly where candles are used. I think safety-lamps are used generally in Durham.

35459. And the proper class of safety-lamps are used?—I think so.

35460. Do you think that the investigation into mine accidents is sufficient?—I think that the inquiry at coroner's court should be wider, and there should be more room for men to put questions. Here, again, I would like to say that we have never, in the County of Durham, had any objection to any question being put except on one occasion—and then, perhaps, the question was indiscreet. But we do know there are coroners, and not very far from Durham, who would be arbitrary and autocratic and object to a man putting questions. I think if a man with a practical knowledge of a mine was allowed to put proper questions in the coroner's court, the investigation into accidents would be better and closer than it is now.

35461. How should that alteration be effected?—You would have to make an alteration in the Act. If you look at Section 48 of the Mines Regulations Act, the last paragraph, you will see that he can only put questions if the coroner allows him.

35462. You would be in favour of some sort of rule being incorporated into the Act of Parliament to bind down the coroner and tell him what questions he should allow to be put, and what questions he should object to?—I do not know that you could do that. It is not for me to define exactly, but I do think that practical men appointed by the relatives of the deceased ought to have some liberty of asking questions. I have heard loud complaints from southern districts about coroners being very arbitrary, but I do not know a coroner in the County of Durham that has objected, except on one occasion. I could not classify the questions to be put. I am only speaking generally.

35463. Perhaps your objection might be met in this way, by some sort of order from the Home Office suggesting to the coroners that they should be very careful how they objected to any question being put?—So long as questions are proper, you should not be subjected to the arbitrary ruling of a man who is clothed with brief authority, or thinks he is.

35464. You would suggest to them that they should be careful how they vetoed any question?—How do you do in the ordinary Law Court? Does a man not ask questions? True, you may say the question is irrelevant. You may think this is a little bit of humour, but I will tell you seriously a thing I myself heard. I was at an inquest upon a man who was killed by a fall of roof, and I heard an intelligent juryman soberly ask whether the stone fell up or down.

35465. (*Mr. Ratcliffe Ellis.*) I daresay there may be many slip expressions, but you do occasionally talk about a roof falling up?—Heaving up. The stone would not fall up to kill a man.

35466. It is a common expression that a road has fallen up when the roof and the bottom have come together?—Heaving up

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35467. But what is the object of the coroner's inquiry? It is to find out the cause of death in the first place, and then in the next place to see if anyone is to blame for it?—Yes. You take a representative of the workmen into court, and you have a jury composed of men such as I have in that playful, but true manner described; he would be able to go into it in a simple way and bring out answers as to the mode of timbering, and things of that sort.

35468. I think the difficulty which coroners feel is that there is an attempt made to push the inquiry further than a coroner's inquiry is appointed to go into. You have simply the two questions: What is the cause of the death, and is anyone to blame for it? It does not necessarily follow that you should go into the whole question of the management of the colliery?—No, but you go into the question of the particular case; whether there was sufficient timber or whether it was properly set, and a practical man brings his knowledge to bear upon the circumstances of the case.

35469. If the coroner's inquiry does not succeed in bringing out the whole of the facts, then there is a Home Office inquiry?—That I know.

35470. (*Mr. Wm. Abraham.*) That is our complaint. You lay it down as the duty of the coroner's court to find out the cause of death; but we want to find out whether there has been any neglect?—Yes. Supposing a man were to show that the timber was not properly set and not properly used—we call them "chocks" in the North—and he was to bring out in evidence by putting questions that chocks were preferable to ordinary props, you might prevent a future accident.

35471. (*Mr. Ratcliffe Ellis.*) With great respect, that would be hardly within the province of the coroner's court. There is someone to blame or no one to blame, and there is an end of the coroner's inquiry. You say if there is a further investigation, that might tend to prevent accidents in the future?—That is it.

35472. I think that is beyond the province of the coroner's court?—I think it could be done in the coroner's court. I say by allowing discreet questions such as a man would put in a coroner's court—not to find fault with the manager or anything of that sort—you might prevent accidents of the same kind occurring in the future.

35473. (*Chairman.*) Then you would extend the inquiry in the coroner's court not merely to inquiring into the cause of death and if anyone is to blame, but how such accidents could be prevented in the future?—It would arise inferentially. I may say when an accident arises in Durham we have full permission to send down two of the men to look at the place, and they can go down at any time. There is no prohibition. They say, "We want to see this place," and they go down. I have never heard of their being stopped yet.

35474. (*Mr. Ratcliffe Ellis.*) I do not want to prevent inquiring into accidents, but here you have a coroner's court which is perhaps the oldest court in the kingdom, and you get the jurors brought by the coroner's warrant officer from round about. It is quite within their capacity to say what is the cause of death, and whether anyone is to blame. But if you are going to submit to that tribunal what steps you are to take in the future to prevent such accidents, I am not quite sure that you would have the proper tribunal for that purpose?—Would not this be pertinent? A man is killed, and the inquiry is as to what is the cause of his death—the question arises: Is this timber defective or proper?

35475. They would say whether there was anyone to blame?—I know cases of this kind which have been brought out in consequence of the freedom we have of putting questions to the jury, that a different mode of timbering would have saved the accident, and the jury have recommended it.

35476. With great respect, I think that is going outside the coroner's court province, and I am not quite sure you have a proper tribunal to decide that question?—The coroner's jury make recommendations.

35477. I think if you find the coroner's court has not brought out all the facts sufficient to enable the prevention of similar accidents in the future, that is rather to be ascertained by an inquiry from the Home Office than by enlarging the functions of the coroner's court?—It would only arise out of the inquiry into the cause of the particular death.

35478. Let me call your attention to Section 45: "Where it appears to a Secretary of State that a formal investigation of any explosion or accident and of its causes and circumstances is expedient, the Secretary of State may direct such investigation to be held, and with respect to any such investigation the following provisions shall have effect"?—But you see at the commencement, it is after an accident of a particular kind has taken place; "any explosion or accident"—that is, after.

35479. In that inquiry he would be able to go into much more detail, and it would be before an expert?—Do you mean I could go back to Durham under this, if I thought fit, imagining or knowing that something would cause such an accident, and I could send to the Home Office and ask for an inquiry before the accident.

35480. No. If you want to find out not merely the cause of death, but in addition to that, how you could prevent these accidents in the future, if you do not get the facts sufficiently out before the coroner's jury, this is the method to be adopted?—I quite follow what you mean.

35481. (*Chairman.*) Do you suggest it would be better to have an Act of Parliament giving the coroner's court larger duties and larger powers than they have at present? The Home Office have now the power of ordering a second inquiry?—Yes, that is after an accident takes place, whether life is lost or not.

35482. You say the coroner's jury do not bring out the facts of the case owing to the coroner not allowing certain questions to be asked. That is a good reason for going to the Home Office and asking for a second inquiry?—It is a very cumbersome way to do it, especially when you are on the spot.

35483. You think the coroner's court and its powers should be enlarged in such a way as to allow certain questions to be put, which, as at present advised, he can do as he pleases about?—Yes.

35484. With regard to certificates for manager and under-managers, have you anything to say on that?—I do not think I can say anything on that.

35485. You think the present system is a fairly good one?—I have never heard any objection to it.

35486. Do you know anything about ankylostomiasis?—No, we have not got it yet. I was on the Continent at Liege with a few of my friends, and I went to see the modes of procedure which were being adopted to prevent it. We have nothing of that sort in the North of England that I know of. Might I just state one thing that may be cognate to your inquiry — in relation to ambulances. Although an ambulance could not prevent an accident happening, I believe it is possible if the men were trained in first-aid work, injuries might be prevented from developing seriously, and life saved. I have before me a report which Mr. Bain gave of the Wingate explosion in which he says: "It may fairly be claimed that the saving of some lives was due to the exertions of the ambulance men who were amongst the first to enter the workings after the Wingate explosion. When exploring in the Main Coal and Five Quarter seams, six men were found seriously affected by after-damp. Artificial respiration was resorted to, and the sufferers were so far brought round as to be able to be handed over to the charge of other rescuers who were following in, to be taken to the shaft." In my opinion, that is only a sample of the cases that would very often arise in a mine if men were trained in first-aid. I would have the officials at least in the colliery all first-aid men, and that would save the development of serious accidents, and might save life. I have before me the commendation of a man at one of our collieries where life was saved. I am glad to say in Durham a very large number of men are qualified in first-aid. I think, according to Mr. Bain, there were 1,318 students in the ambulance classes in the year 1906, and he himself gave a shield which cost about 50 guineas, and they give medals every year, and there is a competition.

35487. (*Mr. Ratcliffe Ellis.*) Would you make it a necessary qualification for a certificate?—No; I would rather suggest that the managers and owners should do it. There are one or more collieries in Durham where they will not employ a deputy unless he is a first-aid man.

35488–90. What objection is there to making a qualification for a certificate?—I think it would be a valuable addition to it.

35491. (*Sir Lindsay Wood.*) You think there should be more inspectors. Would you have smaller districts for the district inspector?—No, I do not say that that is necessary.

35492. You would have one inspector for the large district which you represent and more assistant inspectors,

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and a new class of working-men inspectors?—If you had a new class of what you might call the lower grade, I do not see there is any necessity to have the assistant inspectors multiplied.

35493. You would recommend an increase of a considerable number of the third class of inspectors?—Yes.

35494. Having a smaller area of district for each man?—Yes. There are collieries in Durham which would take up a lot of time. Take large collieries such as the Monkwearmouth or Murton, were there are 2,400 or 2,500 men and boys—it might be a saving economically if a man devoted the whole of his time to them; but there are other collieries much smaller with about 100 or so which might be grouped.

35495. If you had one man at each colliery would that not tend to taking away the responsibility from the management?—I do not think it would do that. I think the managers have more humane feeling than that, and they would not be careless and indifferent because they had a man going round who could point out defects. I would not like to go that far.

35496. It might have the effect of inducing them not to do certain things if they knew another competent man was there to see to it?—If I was an employer and knew a manager would relax his efforts because there was a man going round to look after the cause of accidents he should not be my manager long. I would ask him to seek another place.

35497. Would that not depend upon the amount of inspection that these men would have to give. It would take two men probably to go round the Murton Colliery four times a year. If they were going round in that way, it might have an effect of reducing the responsibility of the under-manager?—I should think Murton Colliery is inspected pretty well in conformity with the Mines Regulation Acts; and I do not think it tends in any way to relax the Manager's carefulness.

35498. Not if you give the responsibility to someone else?—Would this be the logical outcome of your reasoning: in order to make the managers do their duty, we should abolish all inspection?

35499. No; I think inspection, to a certain extent, does good, but if carried to a greater extent it might do harm?—Why should more inspection do harm?

35500. It might.—Well, that is the way in which I look at it.

35501. What number of these working-men inspectors would you appoint?—I was only speaking in a general sense: I have not thought about the number, but that is a matter that could be gone into.

35502. You think they ought to inspect the whole of every mine?—They ought to inspect the sides and roofs of the mine that cannot now be properly inspected.

35503. The new inspectors should?—Yes.

35504. That would take a great amount of time for a man to spend in every colliery?—I do not know that. Take any district or ways, as we call them, in our colliery—if a man took a day to go into one he would have six or seven hours' walking, more or less, in examining the places, and he would do it in a week.

35505. The whole colliery?—Could not they inspect the Hetton Colliery in one week?

35506. Not one man?—Well, suppose he took a fortnight?

35507 There are 26 fortnights in the year, and that would mean a large number of men?—Yes, I admit that, but I think it would pay the country and prevent accidents.

35508. You think wages of about £3 a week would be sufficient for such men?—I think it would be a good wage for a man, in my opinion, and it would be a wage sufficient for the inspection, with the possibility of his rising to the higher grades for which he was educating himself.

35509. Do you think he should hold a first or a second-class certificate?—Yes.

35510. That would mean that he would have had five years' experience underground?—Yes, if he was a trained workman he would have had that—he would start as a boy.

35511. You say the inspection under Rule 38 is to a certain extent carried out now?—Well, the men inspect.

35512. Not to the extent you would like to see it?—It is not.

35513. Is there any reason why it is not carried out?—Perhaps the first reason which strikes my mind is because they have such large trust in the managers, and perhaps another thing may be the point of economy, that they do not want to pay. They think the managers will look after that.

35514. It has been suggested that in some districts it is because the men are punished in some way or discharged who do it?—That, to us, is a foreign matter altogether. In the whole of my experience I have never known of a man who has suffered the least by pit inspection, and any report he might make fairly and truly. What is done in other districts I cannot say, but it is right for me to say what I find in my own.

35515. With respect to the deputies, is their work not chiefly for the safety of the men in the mine?—The safety of the mine and men. They look after the men and the ventilation, the doors and brattices, and such things, and if anything happens to a boy from anything, and if he cannot get help—if a wagon gets off, for instance—he sends for the deputy. But ofttimes, as you are aware, he may have two flats, as we call them, to attend to, and they might be a great distance from one another.

35516. His duties are almost entirely confined to the safety of the men in the mine?—Yes, and firing shots. The deputies generally fire them at their flats. The deputies in many cases with the new explosives and new arrangements stem the holes.

35517. And they have to see to the timber?—Yes, I used to get coals where there was an old deputy, and his last words to me were always "You are all right—now make it half your work to take care of yourself." That was very good philosophy, but he cut the timber and left it for the men to set up.

35518. You think the area they have to look after is too great?—I think so now. The rush they have to undergo to get round and set the timber and cut it is so great to enable them to have true regard to the sides and roofs and places.

35519. You would not make any general Rule as to the number of men they have to look after?—That depends upon the character of the mine. If he did his duty he would have to inspect all the sides and roofs every day from his station into the face in every place; and with a large number of men and shots to fire it is impossible for a man to do it.

35520. You could not draw a hard and fast line as to the area extent?—You could not do it.

35521. To some extent it must be left to the management?—Yes. I know one hears loud complaints both from men and deputies.

35522. I understood you to say you did not know of any fines being inflicted by the managers?—I do not. Perhaps Mr. Johnson, who is coming afterwards, may know, but I do not know of any fine that any man submits to willingly. It may be so, but it is outside my knowledge.

35523. I thought there might be fines agreed to between the men and the manager for trivial offences?—No. I have known cases where men have refused. The manager has said "If you pay 2s. 6d. or 5s. you shall keep your work," but I have known that refused.

35524. You have known such things being agreed to as well, I suppose?—I have not known of it. There may be such things, but they are not sent in to us, and therefore we do not know of them. Mr. Johnson will be able to tell you more about it, perhaps

35525. With respect to the Special Rules, in your district I think the rules have always been originally drafted by the owners?—Yes.

35526. They have not been drafted by the men and then sent in?—No, drafted by the owners, and then we were called in in consultation, and they were discussed, as you know, at five or six meetings.

35527. There must be a draft of some sort?—I have no objection to the employers drafting the rules, but I ask that the men should be brought in right away at once in consultation, because I believe you will get a better set of rules, and rules more agreeably accepted if that is done.

35528. You said you would recommend separate travelling roads?—Yes.

35529. That would be a great advantage in mines where it could be done, but in old mines it would be practically impossible, would it not?—In old mines it would be a great expense. Take, for instance, the term

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that we use in the north: you have a pair of winnings, heading places, going together—well, the parallel one might simply want opening out.

35530. That would be practically a new part of the mine. Take one of my own mines, for instance, the Eppleton Colliery: to make a travelling way into the face would be practically impossible?—Still, you have the place driven, but it is cut down. The place would be driven at the same time as the main intake would be driven.

35531. There are returns each side of the main airway?—Yes: they could be separate from the returns.

35532. You would have to alter the return airway—that would mean taking it through the goaf?—If you have laid the goaf down so near it would be so.

35533. Is there in Durham generally sufficient space left between the rails and the side of the road?—So far as I am concerned I have only been down lately in connection with explosions, and I have generally found a goodish space between.

35534. You say endless haulage is more dangerous than main and tail rope?—Yes, and I believe the men run a risk in running between the tubs.

35535. Because going slow they go between the tubs thinking that they can get past easily, and they are mistaken?—Yes. You will find in Mr. Bain's Report of 1906 a case where a boy was killed in trying to get a bogey on to the rails.

35536. You have been on the Continent?—Yes.

35537. Have you seen the washing of the men and the place where they all wash themselves?—I have not. I have been on the pit bank at one or two places, but I never went to see the baths.

35538. They are not baths?—I know. They are washing places. I have heard tell of them in Cornwall, but I have never seen them.

35539. Do you think such a system as that shown in these photographs would be useful in the mines of Durham?—I know it would be more useful to put one in the house. If you had what the Americans call a "shanty"—a bath-room—I believe the men would gain in vigour.

35540. These baths are made to hold about 50 men at a time at the sprays?—I do not know. I never went to see them.

35541. It is suggested there should be an ambulance. I think that is now the subject of examination with respect to certificates?—I do not know. I know some collieries where the manager asks, as an indispensable matter, that the deputies, at least, should be all first-aid men, and I think it is very useful.

35542. That is not general?—That is not general. There are a very large number of collieries where we have first-aid corps, but I would have them multiplied. If an accident occurs, the miner is away from the doctor, and he must depend upon the, to a certain extent, rough first-aid given to him. If you look at Mr. Bain's Report for 1906 you will see a reference to a remarkable case. In my opinion if there was a first-aid man there life might often be saved.

35543. I think in the Durham district ambulance work is one of the subjects of examination?—I hope so.

35544. (*Mr. Cunynghame.*) You have been giving some evidence upon the question of fines?—I was asked if the men were fined by the managers.

35545. You understand, of course, that the chief object of the Home Office is naturally to get the Rules obeyed as well as possible, and that we have no predilection one way or the other for or against fines?—Quite so.

35546. I want to put one or two points before you for your opinion with regard to them. In the first place are the men's Associations not influential enough to protect the men from unreasonable fines?—As an Association we object to fines at all by the manager.

35547. Supposing fines existed, may we take it that the Association would be influential enough to protect the men from unreasonable fines or not?—Suppose they existed, that is, suppose any Act of Parliament contained a provision that a manager should fine a man for breaking a Rule?

35548. No: supposing an Act of Parliament did not forbid it, and it was a practice. As a matter of fact, I want to know would the Associations be influential enough to protect the men from unreasonable fines? Before you answer it I will give an instance of what I mean: in the East-end of London, in the sweated industries where the people (women) have no organisation at all, there are very objectionable fines on a wholesale scale inflicted. Would that be impossible or not in the case of miners?—Well, it is a form of fine and punishment we should object to.

35549. Would not your Trades Union Association be sufficiently powerful to protect the men against unreasonable fines?—We think we are "Hackenschmidts"—so far as we are concerned we think we are powerful enough for anything. You have to consider the friction that would arise.

35550. I want your evidence upon it generally?—I think it would cause friction if we had a manager fining a man. We should have to go into the merits and the amount of the fine, and we think that if a man violates the Act of Parliament he should go before the proper tribunal.

35551. I should like to put before you the facts of a case which I have been told of privately, which occurred at a certain colliery. A youth who was a pony driver infringed a Special Rule: he rode down the main plane in an empty tub without permission, and instead of being fined for that he was taken before the magistrate and prosecuted. When he got there he pleaded guilty, and he was fined 2s. 6d. The case took up the time of three men who lost half a day's work to go up to the court, and, in addition to that, the solicitor had to be paid 30s. for costs?—I quite see all that.

35552. I am putting a case, which, I believe, is rather a common one, of the trouble and expense and cost to get this boy fined for doing an act which was decidedly dangerous to his own life. Would it not have been simpler to have some means of fining him the 2s. 6d. in the first instance and have done with it?—Again, I can only just fall back upon my position, that the magistrate's Court is the Court for the punishment of dereliction of duty, so far as the Special Rules, or Act, are concerned. I was on the bench myself recently, where three young men were fined for violating the Special Rules, and I say here again that they ought to go before the magistrate.

35553. Would not the 30s. cost on the employer and the loss of time of three officials lead to the want of prosecutions, or their not prosecuting in proper cases?—Might you not have another aspect of it?

35554. You see my question is, would not that cost lead to the want of prosecutions?—I will answer it in the Scotch fashion, if I may. Might you not have this aspect that if you have a slim sort of fining you might have great danger to the men by a lad knowing he would only be fined say 2s. 6d., and you would have a young man doing something serious because he felt confident that there would only be 2s. 6d. fine.

35555. That might or might not be met by compelling a prosecution with regard to a large number of offences, and making it legal that there should be a prosecution and prosecution only—and only allowing fines in a certain number of trivial cases?—What do you call "trivial cases"? Who is to judge of the triviality of the case?

35556. This rule might lay it down. One rule might say that you could have a fine and another would say that you must prosecute?—You cannot differentiate in the case of violation of a Rule except you know the violation. You cannot sketch it out in the Act of Parliament and say "If you violate Rule so and so."

35557. You might say that such a thing as to run down in an empty tub is a thing in respect of which there might either be prosecution or a fine, and you might say that taking down matches into a mine was a thing which should not be capable of a fine?—It might be more dangerous for a man to ride in an empty tub than even accidentally taking matches down in his pocket. I have got into a cage with another man's jacket on with matches in the pocket. There may be no danger. A man may take down matches into a mine, and he regrets it.

35558. True, but if you are setting out a Code of Rules it may be that riding in an empty tub might be a matter for a fine, and taking matches down a matter to go before the magistrate?—Taking matches down into a mine is oft-times extravagantly used. Take the case of a miner who has a garden or piece of ground, and he is working in his garden in the morning in his waistcoat: he takes a pipe, and he has a couple or three matches in his pocket, and then afterwards goes down the mine quite unconscious of their being there. The man does not intend to take them down.

35559. That is just the point. It seems to me your argument, if I may say so, rather confuses together the

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tribunal to try it and the punishment to be inflicted. When I have him before a magistrate for a case like that it would be only a case of reprimand: but would it not be better in a certain number of cases which may be trivial, to allow for the infliction of a fine instead of taking them before a magistrate?—I do not think you can differentiate.

35560. Every day the common law of England has to differentiate. You are aware that there are a number of cases which can be tried before a magistrate, and others must go before a Court of Sessions or to the Assizes?—And so, in these cases, a man might commit an offence as in the case I have just mentioned—a very trivial violation—and the magistrate could differentiate then as to the amount.

35561. But the law differentiates as to the tribunal before which he shall be sent?—Well, every violation of an Act of Parliament, in my opinion, should go before the proper tribunal to be decided, and not be decided by a manager.

35562. What is your objection to a fine for a trivial offence levied by the mine owner?—All I can say is I believe the man who violates the Act ought to go before the magistrate.

35563. Assume it was found that a fine was a deterrent would not that satisfy you?—That is putting to me a hypothetical case which I do not think applies at the present time.

35564. You are aware that a good many societies of different kinds punish their members by fines?—You are speaking of a Trade Union with its constitution and regulations, which says, "If you violate one of these you will be fined." But fined by whom? Fined by the committee of the Trades Union.

35565. Who make the law. You mean the person who makes the law ought to be the person to fine under it?—I do not see that they make the law, because it is made in Parliament.

35566. It seems to me your objections to fines are of a philosophical and theoretical character rather than practical?—I believe if you were to adopt a wholesale arrangement of fining by managers, and leaving it to their dictum and option as to the amount, you would be introducing a very dangerous element. As I have said, in this year I do not know of a case of fining in the County of Durham. I am the general secretary, and I do not know it.

35567. Your argument comes to this that Durham manages to get on without fines?—I understand that Inspector Bain says there are fines. I do not know of them, and they have not been reported to me. I may say this: if we knew of them we should object.

35568. Permit me to say that your objection seems to me to be based upon perhaps rather the theoretical or philosophical principle that the person who makes the law should enforce it. I wanted to find out the practical objection?—Well I will put it there is an ordinary business common-sense objection.

35569. Now about the Coroner's Courts. We have had it stated here frequently that the miners who appear on behalf of Associations or otherwise do not always get all the questions they want put?—As to the County of Durham we have no objection. I never knew but one question refused to be put in the whole round of Coroners' inquiries; but I do know a coroner not very far from us who objected, and I have heard my colleagues in the south speak of coroners being very arbitrary. As a means of closer investigation into an accident I would allow greater latitude in asking questions.

35570. I want to put before you an objection to giving that right by law which possibly has not occurred to you, but which may be a stumbling block in some people's minds. A coroner's court is a court of justice, and a man there may be about to be committed for manslaughter. To give a right to a number of people to intervene and ask all sorts of questions in respect of which a man's very heavy punishment indeed may be impending, would be of doubtful validity, and it would be only justifiable if you made a very strong case. Have you reflected upon that? It is not like a summary court of inquiry?—It is an inquiry into the cause of a man's death.

35571. It is to find the guilt?—Is that not a proper court to find the guilt?

35572. Even in a trial at Assizes, if a man is being tried for his life, the judge would not allow any Association or other tribunal to come in and ask questions?—That would be done by the barristers.

35573. In the coroner's court if you were to give a right to representatives of miners or others to come and ask questions it would be very much as if you were interfering at an Assize court?—If the miners' representatives go to a coroner's inquiry, as I understand they do, and I have gone to a few myself, it only inquires into the cause of the men's death, and if the questions put lead to the fact that there has been insufficient timbering, and the manager or anyone else is the cause of that, and the man has lost his life in consequence, surely they should have a right to ask about it.

35574. In an Assize court no one other than a barrister is allowed to ask questions. Should that not apply to a coroner's court?—For the time being the representative of the workmen is the barrister; and he goes there as their representative.

35575. I can hardly put the case as high as that, because in an Assize court the barrister is the prosecutor?—He is there to get at the facts of the case.

35576. He is there for more than that; he is there to secure a conviction?—My point is that for the time being in the coroner's court, the representative of the workmen is the man to get out the facts of the case and the cause of the man's death.

35577. Would you say he had a right to ask anyone whether he was guilty or not?—No, he would not do that.

35578. So that there should be some limitation?—He would not say to the man who was giving evidence: "Are you responsible for this man's death?"

35579. You would not regard him as a barrister for the prosecution?—The barristers are perhaps too high to compare an ordinary miner's representative with, but I put him in the stead of the relative of the deceased man.

35580. I quite see his position; the only point to my mind is about giving him an absolute right in the place of the coroner in reference to asking questions?—Well, the coroner has to sum up, and he tells the jury what he thinks.

35581. Now a question about these baths as shown in the photographs. I do not know whether that method of bathing would be popular with the men or not; but how do you think the miners could be got gradually to adopt the plan of going to the mine in their own clothes, and going down the mine in a special suit of clothes, and then washing when they come up?—I have not considered the question. I know in Cornwall it has been in vogue for many generations; men go in their every-day clothes, and the ordinary working clothes are kept at the mine, and then if they wish, after a bath, they can go home dressed again.

35582. That is a thing which you think would gradually become popular?—I am in favour of baths being attached to the workmen's houses rather more than that.

35583. What are your reasons for that? I have formed, with not a great knowledge of things, rather a contrary view. It seemed to me for a man to get into a dry suit of clothes to walk home in, for instance, would be a good thing?—It would be.

35584. But it would not be if a man had to get home in that way on a wet day?—He would get wet anyhow.

35585. Might he not come up from the mine and then get wet in going home?—We are arranging for the matter universally, not for exceptional cases. I do not see that the principle should be made compulsory if a man does not like to adopt it—that men should be washed by absolute force. You would not have a man taken home and washed.

35586. No; but I ask you to suppose that facilities were given?—I have no hesitation in expressing to you my profound ignorance of what the workmen in Durham would say on that.

35587. (*Mr. Wm. Abraham.*) Is it not possible for an observance of a Special Rule on the part of a certain class of men to be a kind of prevention to his facilitating the bringing out of coals?—I do not know that I follow that.

35588. Take the case of a haulier as we have them, and between the horses and the tram they have what is called a gun. The practice for years has been for the boy hauling to ride on that gun and to get the horse light. That was made a breach of rules a few years ago?—It is not a breach with us.

35589. Knowing that to be the case, would it not be an improper thing to allow the management to decide?—If it was part of the Special Rules agreed to, as I have said, between the three parties, the employer, the inspector, and the workman, I do not see any objection could be made to it.

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35590. The observance of that Special Rule would prevent that boy doing it?—It would limit his opportunities for work, and he would not get so much coal out.

35591. That is the point?—And there would have to be more boys employed.

35592. With regard to the fining is not the breach of that rule rather an improper thing for the manager to decide?—I quite agree. I do not think in any class of violation should the manager be allowed to fine any boy at all.

35593. There is a rule also to prevent the haulier going before the horse when the tram is in motion?—I think in those cases the boy should have facilities for getting the coal out as fast as he can, provided he keeps safe. He must go before or behind.

35594. And if he went behind the tram the horse would have no light?—The horse might not care whether he went or not, if he went behind the tram.

35595. You think it is undesirable that that matter should be in the hands of the manager?—That is my opinion.

35596. According to your experience, is it not the fact that the real managers, the best managers of mines, seek to have the mines properly inspected?—I speak now as universally as a man can speak: in the County of Durham I do not know of a single case where a man has suffered for inspecting. Every facility is given for them to go, when an accident takes place, and look at the place, and there is no deterrent placed in their way.

35597. In fact, the principal managers desire that that inspection should take place?—They do. There is every facility given, and an official goes with them every time they go round.

35598. You think that that in no way reduces the responsibility on their part?—I do not see why it should. It is maligning the managers to think so.

35599. Do the deputies put up the timbers?—Yes.

35600. As well as cut them?—Yes.

35601. What class of timber do they cut, and what class of timber do they put up?—They cut the props sent in to make different sizes. They cut a prop to suit the section of the seam, allowing for the plank to go on the top, and, if there is any need for more timber, the man sees the timber and puts it up himself.

35602. What class of timber had you in your mind when you said you would rather put it up yourself?—These ordinary props and planks. I should know where to put the prop to suit myself.

35603. Your opinion is that every hewer of coal should be a practical timberman?—I say he should know how to set timber. I do not say that the deputy should not be there to set timber when required. I was speaking rather of what the deputy has to do, having such a large number of men in many cases to attend to. They go in a hurry, saw the timber, and leave it in convenient places for the men, and if he wants a prop before they come back he puts it up.

35604. You would have no man employed in the working places unless he was able to put up the timber to protect his own life?—That I could not say; but I think every man should be able to look after himself to protect himself in a mine.

35605. You say, I think, that no man should be allowed the charge of a working place unless he was able to do that. I quite agree with that attitude of the men. With regard to firemen, is it in your district part of their work to examine the travelling roads from the station up to the working faces?—That is the deputies' duty. They are supposed by Act of Parliament to do it, but I have indicated that a man having a large number of men, and only having about an hour to examine, and having half a mile to travel to the furthest place, and 13 or 14 places to examine, cannot properly examine the sides and roof.

35606. You think in any new enactment something should be done not with the view of taking the discretion out of the hands of the management, but that the management should have to do something practical to confine those men's work to what it is possible to do?—There is the possibility of another class of officials, what we call master-shifters, or men over the repairers, and it is possible for them to inspect the sides and roofs.

35607. You think there is necessity for a law on that point?—I do.

35608. (*Mr. Ratcliffe Ellis.*) Why do you suggest that the third-grade inspectors should be less qualified than a chief inspector?—Because I think you get more in touch with the practical and ordinary working man, and he is the man who has more practical experience of the working of a mine. Take the present inspectors: very few of them have been really working men. It demands a man with a very high education. But the class of man I have suggested, if he was able to pass for a second-class certificate, would be, in my opinion, competent to examine all that was necessary.

35609. What would you expect such a man to do?—To inspect the sides and the roof as he went—to see it was safe.

35610. The timbering?—Yes, the timbering.

35611. Would he have to do anything with reference to gas?—If he found gas it would be his duty to report it.

35612. Would he be qualified to measure the air?—He would not have a second-class certificate unless he could.

35613. I am not so sure of that. You think he ought to be qualified to do that?—I think every official in the colliery ought to be so qualified. Let me say that the district inspector never comes unless there is a serious calamity.

35614. The qualification of the third-grade inspector would have to be as great as that of the district inspector?—Yes; but the suggestion for a third-grade inspector is to make the inspection more frequent.

35615. We agree that for purposes of inspection, his qualification must be as great as that of the district inspector?—He would have to inspect for gas, and he could not be a second-class fully-qualified man unless he could inspect for gas.

35616. In what respect should this man be less qualified to make the inspection than a district inspector?—I do not know what qualifications a district inspector has to possess.

35617. I ask you in what respect as an inspector a person to inspect the safety of a mine ought to be different to a district inspector?—I cannot say, as I tell you. I say that the man who inspects the mine should have some knowledge of the practical working of a mine.

35618. You want a satisfactory inspection of a mine?—Yes.

35619. Your view is that this third-class inspector should be as capable of inspecting that mine as anyone?—No, I do not say he should be as qualified as a district inspector, and as well educated.

35620. I do not say as well educated, but I ask about inspection?—This I do say: a man who has qualified himself by being a workman from his boyhood upwards and passed a second-class examination knows sufficient to examine a mine.

35621. I suggest there are other people who are as fully qualified who have not worked in a pit as a boy. Have you in your mind any qualifications necessary for inspection less than that which is possessed by a district inspector?—The man I have before my mind to suggest to you is a man who has been a workman in the mine, not a man from school—not a man who has gone in for an apprenticeship so as to become a manager, but a man who has worked in a mine and knows the nature of gases and can measure the air

35622. He must be qualified to measure the air?—Yes.

35623. And must understand when timbers are set?—Yes.

35624. And understand the nature of the gases?—Yes.

35625. Assuming him to be qualified either with a first or second-class certificate, then what has he to do in making the inspection?—Examine the pit as to the sides and roof. I suppose the great essential of your inquiry is accidents from roof and sides.

35626. If he finds it is not set in accordance with his view, what has he to do then with reference to timber?—He would have to make complaint to the manager.

35627. Do you think for that purpose it is desirable to have a less qualified man than a manager?—He makes complaint to the under-manager.

35628. Take it generally. For that purpose is it desirable to have a less qualified man than a manager?—I submit to you the idea in this way: If you think that the qualification of a manager is necessary, you can arrange it in that way. but I do say that for the safety of sides and roof there should be a closer inspection.

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35629. The only point is whether or not you think he should not be as well qualified a man as the manager of the mine that he has to find fault with?—He will be if he takes a second-class certificate.

35630. You think that he should be as well qualified as the manager of the mine?—I do not say that. I say there are hundreds of men in Durham to-day with first class certificates.

35631. But that is not the question. The question is, Do you think he should be as well qualified as the manager of the mine?—I can only give you the answer I have given you if you ask me ever so many times. If he holds a second-class certificate he would be qualified to inspect the mine.

35632. You do not think there is anything in the suggestion that is made that too close an inspection might tend to relieve the management from their responsibility?—I do not think a man is worthy to be manager of a pit that allows it.

35633. Now, Mr. Pickering, an inspector of considerable experience, gave this answer before us: "I think if you have a Government official constantly going to the mines, the managers and owners will at once not take so much responsibility on themselves, they think that the supervision as regards safety is coming from the Government, and they will more concern themselves with the economical questions. At present we try to make the managers and owners as responsible as we can." Do you approve that?—I do not agree with that. I would not malign the managers and owners in this country by saying that.

35634. You do not desire to place upon the Government Inspector the responsibility for the management of the mine?—No. Each man to take his duty.

35635. He is put there to see the Mines Act is carried out?—Exactly.

35636. With regard to the question of discipline, I understand you say you disapprove of fining?—Yes.

35637. You are familiar with the provisions of the Truck Act—that a man must agree to be fined?—Yes.

35638. And then it must be reasonable?—Yes.

35639. And must be put upon his pay-ticket?—Yes.

35640. And a list kept for the inspection of the inspector?—Yes.

35641. That if the fine is unreasonable or if any of these requirements are not complied with, that the employer is liable to be prosecuted for a breach of the Truck Act, and the workman can get back the excess of the fine?—Yes.

35642. Notwithstanding all those provisions you do not think it is a desirable way to maintain discipline?—How can he enforce it except by putting up the rules?

35643. By fining, I suggest?—That is subsequent.

35644. You say you agree that there is great cost in bringing them before the magistrate?—Yes.

35645. In addition to the cost which Mr. Cunynghame put to you, there is a day spent by the officials going down to obtain the summonses?—Yes.

35646. There is a probability that you cannot get it tried when you get there, because there is not a qualified magistrate?—Just so.

35647. Now, with this responsibility upon the manager, that he must be either responsible himself or shew he has done the best he can to enforce the rule, would you still say you would prosecute?—I say that every breach of the Special Rules and Mines Act should be tried by the tribunal provided by the Mines Act. Would, in your opinion taking all reasonable means include the fine imposed upon this boy, for instance. How could he fine him before he committed an offence?

35648. He has to prevent his committing a similar offence.—He could not fine him before he did it.

35649. The manager brings before the magistrate some person who has committed some act. He says "I have put up the regulations and done what I can—I have appointed my managers—I have inflicted fines"—if that is sufficient, the magistrate would say "I discharge you." But your view is this, that he would not be entitled to an acquittal, although perfectly innocent, except in every offence against the Act he fined?—I say it would be sufficient excuse if he put up the regulations where the men could see them.

35650. (*Chairman.*) I understand there have been cases where the mines inspector has prosecuted the manager for not prosecuting in the case of a breach of rules?—Yes. The question put to me implies this, that it is now competent for the manager under the Act of Parliament to fine men, and he could not excuse himself before the magistrate except he did fine them. I say he has no right to fine them, and I do not think this Section of the Act gives him power.

35651. It enables him to take means to prevent the recurrence of a similar breach of rules; and supposing he was culpably negligent in not prosecuting a person for a breach of the rules then the mines inspector might reasonably have him up for refusing to prosecute?—They could not bring the manager up because he had not fined a person who violated the rules.

35652. He must either prosecute. fine. or do something?—Yes.

35653. He might go to the man and say: "I ought to fine you 10s. for that offence—do you agree to that"—and the man says "No"—and then he takes him before the magistrate?—My answer is that the manager should not have that option to fine; he should take him before the magistrate.

35654. He might very well be had up under that section for not having enforced the rules, even if he had put them up and made them known to the men and had refused to prosecute in a proper case?—If he refused to prosecute in a proper case, and the mines inspector got to know, the mines inspector would prosecute him.

35655. My point is this: I agree with Mr. Ratcliffe Ellis that the mines manager is so far responsible for the enforcement of discipline that he cannot justify it in all cases by simply saying he has done his best to bring these rules to the notice of the men?—But Mr. Ratcliffe Ellis's question as I understood it was this: that it was not sufficient for the manager to show he had posted up rules and regulations and taken all reasonable means, but he must show if there had been violation before, and that he had fined him.

35656. (*Mr. Ratcliffe Ellis.*) He must show he has done something to maintain discipline?—Quite right.

35657. I ask, considering the great expense of prosecuting in every trivial case, is it a fair thing to the manager to leave him subject to this liability and say he shall only maintain discipline in one way and that is by bringing the defaulters before the magistrate?—It is the Act of Parliament and the tribunal is provided by the Act. Any man who contravenes the Act should be tried by the tribunal appointed.

35658. Of course there is another remedy, and that is dismissal?—Yes.

35659. Is it a desirable thing that it should go forth that the manager should be obliged in order to save himself under that 50th Section from getting into difficulty, must either dismiss a man or prosecute him?—You must excuse me from answering that question.

35660. Do you suggest that at this preliminary meeting when the Special Rules are drawn, before they are submitted to the Home Office that the workmen should have the power of vetoing the rules?—I do not put it in that way—I put it to open the discussion.

35661. Suppose they do not agree, the employers would still be entitled to send the rules on?—Yes.

35662. Do you say if the employer sends his rule to the Home Office before the rule is established, that the workmen or anyone should have an opportunity of objecting to it?—Yes. But I think it conduces to concord and harmony if you call the parties interested into mutual discussion of the rules.

35663. Still the employer is to please himself whether he proposes the rules or not?—Under the Act of Parliament; but I am suggesting an amendment.

35664. I want to know your amendment. At this preliminary meeting the employer is still to have a right to propose his rule, notwithstanding what takes place at the preliminary meeting?—But I still think the men should have a right to send up their objection.

35665. The employer says "This is a rule I want to propose whether the men like it or not." He is allowed to propose it. I want to know whether your view is not met supposing he sends that to the Home Office, that the Home Office advertises the rule and then they invite the objection of anyone, and then before it is published they meet together again to get rid of any differences?—I think you had far better anticipate the differences by getting them discussed and settled before you send to the Home Office.

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35666. Supposing it was "No rule shall be established until it has been submitted to the men"—you would not give the men a right to say that that rule should not be proposed?—They would try to arrive at a mutual understanding, and if they could not the Home Office would be the arbitrators in the matter. The men should have a right to say: "That is what we propose in opposition."

35667. You think that before the owner is entitled to propose a rule, he ought to call the men in conference?—I think it would lead to amicability and good understanding.

35668. Still he is entitled to propose that rule afterwards whether the men agree or not?—That is always his right, I think.

35669. Have you any suggestions to make for additions to the present regulations with reference to shot-firing?—Not that I am aware of.

35670. It has been suggested it might be desirable if no shots were fired in the haulage roads, except under the immediate direction of the manager?—Do you mean that the manager should be there?

35671. That either he should be there or should prescribe the weight of the explosive and be fully acquainted with what the shot has to do and prescribe the conditions under which it is to be fired?—As a practical miner, and I have worked at all these classes of work—I think the workman is the best judge as to the amount of explosive required to bring down any portion of stone. The manager is there and sees what we call the jacks or spring, or whatever it is. Except he saw the shot put in, he could not tell the amount of explosive. It is the practical man who does it; he puts the hole where he thinks best and he knows, by his experience, what quantity of explosive it will take, but a manager should not do it—he would have to be there every time a man starts to drill a hole.

35672. You do not think there is any addition required to the present regulations, if they are carried out?—I think not. I may say as to the haulage way, I think greater attention should be paid to the dust.

35673. That is being made a subject of inquiry. Do you think a shot should be fired at all in the haulage road?—I think the manager and officials should tell men whether they are to be fired in the haulage road.

35674. It should not be done indiscriminately?—No. The official says to him: "You may go into a certain place and do something"—and considering the terrible danger that lies in dust I say the manager or official should tell the man whether he should put a shot in or not—he should not tell him how to put it in, but he should tell him whether he should put it in or not. He would say: "Now you can go and put a shot in that."

35675. You have given two reasons which to your mind are a source of danger, one is that familiarity with danger is apt to breed contempt, and the other is too great a desire to make money?—Yes.

35676. Can you suggest anything by which the first—familiarity—can be dealt with?—I think there is gradually a change taking place.

35677. Can you suggest any legislation or recommendation to be made by this Commission with reference to that?—No; but it is quite a natural thing to me that men's familiarity through being trained up to it from boyhood, will induce in their minds a sort of contempt.

35678. What I want you to answer is whether you think any legislation or recommendation should be made by this Commission to alter that?—I do not know myself how you could do it by legislation.

35679. Then too great a desire to earn money. Do you think we could alter that?—I do not see how you could by legislation; but there is the fact.

35680. Do you suggest how we can find out these dangers and avoid them?—No; but there they are.

35681. There are dangers which no legislation can guard against?—So far as regards making money and the desire of men to make money, that arises in their trade, and I do not see how you can restrict it by legislation—you can by teaching and training.

35682. It follows there are a number of accidents which must happen in a mine which cannot be prevented by legislation?—I am very much afraid that in mine working there will be accidents, which no earthly skill can provide for; but at the same time we can try to lessen them.

35683. (*Sir Lindsay Wood.*) I should like to ask you this with reference to the remarks you made about no fines being made in Durham, was that reply confined only to the fines for breaches of the Act or General Rules?—I am speaking subject to correction, but I do not know myself personally of any fine we have permitted in Durham, but as I say Mr. Johnson will be able to answer that question perhaps more fully.

35684. Not for any offence?—Not any offence—not to my knowledge. If it has come before us in Committee, we have said to a man: "We do not agree to fines."

35685. There are collieries which do fine and collieries which do not fine, Mr. Bain says?—Well, I do not know.

35686. (*Mr. Enoch Edwards.*) I understood you, in answer to his Lordship, to say that you had six inspectors covering the northern districts of Durham, Northumberland and Cumberland?—And North Yorkshire, the ironstone mines. There may be a mine or two in Westmoreland, but that is very small.

35687. Three chiefs and two assistants?—There are two chiefs, and four assistants.

35688. Two assistants under each chief?—Yes.

35689. I suppose they reside some in one portion of the district and some in another?—The three for Durham and North Yorkshire reside in Durham, and of the three for North Durham and Northumberland and Cumberland, one resides at Cleator Moor, in Cumberland, and the other two reside in Newcastle.

35690. For Durham what distance would the inspectors have to travel from their homes to some of your remoter collieries?—Do you mean in Durham?

35691. Yes?—I should think the furthest colliery you would have to travel to would be twenty-one or two miles.

35692. So that some amount of their time would be spent in travelling?—I am not speaking of North Yorkshire.

35693. Of course. Is Cumberland worked from Durham?—From Newcastle—Northumberland.

35694. Of course they have a resident inspector somewhere in the County of Cumberland?—One lives at Cleator Moor, in Cumberland.

35695. Under the present system some amount of time will be taken up in travelling?—Yes.

35696. All the collieries will not be in direct communication with railways, very likely?—No. There are some places where they will have a good bit to travel by road.

35697. So that it will depend upon the size of a man's district as to the amount of personal supervision he can pay to a colliery?—Yes.

35698. Have you thought out what might be saved by making more districts?—No, I have never thought of that. I thought that the districts in the north were pretty nicely arranged, providing there were a number of subordinate inspectors.

35699. Yours would not be so extreme a case as some?—No.

35700. The district inspector will have a considerable amount of clerical work?—I suppose he will.

35701. He will visit collieries largely in cases of accident?—He goes in case of an accident, I should think, but not only in the case of an accident if there should be any complaint from the men. I have no doubt he will go in that case, or send his assistant, as the case may be.

35702. I understand from the opinions you have expressed that there is no complaint to make against the present inspectors?—Not against their doing their duty none whatever.

35703. The same observation would apply to your deputies or overmen, as to the district being too big to give what inspection is necessary?—Yes.

35704. They read out to you the observations of Mr. Pickering, which I think, after my experience here, is largely in harmony with most of the observations of the inspectors, that there is a fear of too much inspection; but you do not take that view?—No. That has always appeared to me as a sort of belittling of the manager, that he would take advantage of any additional inspection and neglect his duty.

35705. I understood from the observation that has been put by several that you resent that interpretation?—I have no special plea for resenting it, but I do not think it would make him any more careless if there were more inspectors.

35706. You said you had hundreds of men?—I think I am right in saying hundreds.

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35707. Who were qualified with first-class certificates?—Perhaps I may be wrong as to "hundreds," but there is a very large number; you can take that from me without my saying "hundreds." There are a very large number of young men and middle-aged men in Durham who hold first-class certificates.

35708. Who are not managers?—No, they are workmen.

35709. In some cases they would be firemen or overmen, and some of them would be working at the coal face?—Yes.

35710. They would hold such qualifications as to be in your judgment competent to take this other grade of inspectorship?—Yes, that is my idea.

35711. So that at any rate, so far as you are concerned, in Durham already there are competent men here, there, and everywhere, who could be employed as additional inspectors?—Yes, that is my idea.

35712-13. In your judgment, after your length of experience, you agree it is desirable where there are subordinate inspectors that they should hold a qualification equal to the qualification of the men under whom they would have to inspect?—I think so. I think he will come more into contact with the under-manager. If there is anything above, the district inspector would deal with it; but I think he ought to have a certificate equal to that, and also experience as a workman.

35714. You agree that it is desirable there should be more inspection by inspectors?—I think so.

35715. And that the inspection should take the form of complete inspection?—Complete supervision, yes.

35716. It has been suggested that you may inspect by a sample. What is your view with regard to that?—I do not see how you could do it. Collieries differ so much; they differ in strata, in thickness of seams, and in every way.

35717. You would not take it in a large colliery employing 1,000 men, with six miles of roadways, that an inspector would go into a pit and inspect an area in one seam, and that that could be taken as a sample of all the pit?—That would not be inspection.

35718. In your opinion, it would not be satisfactory unless the inspector had made the inspection and reported on the inspection through the mine?—That is my idea of it.

35719. With reference to timbering, I think we have gathered from the observations of other Witnesses that your methods in the north differ largely from the methods in most counties?—Yes.

35720. And you also have a class of men set apart to do the timbering?—Yes.

35721. According to your present view you prefer to set your own timber?—If a timberer came in and could set timber without interfering with my convenience and with the rules, he could put it in; but if it was not necessary I would rather put it in myself.

35722. That is his special work, to set timber?—He is responsible for that work.

35723. I understood you to say if the deputy had left and gone to some other place, he would leave timber with instructions to the man to make himself safe?—Yes.

35724. Do you only refer to setting props with lids on?—That is all.

35725. They do not do at the face any bar timbering?—What do you call that?

35726. Two legs and a bar?—Yes, put up two props; we call them planks, but you call them bars. It is a bar about two or three inches thick.

35727. In setting a prop he would have a small lid at the top?—Yes.

35728. Is that the timbering the deputy would do?—The deputy would do that, and the man sometimes, if necessary, if he found himself unsafe.

35729. In working at a face in ordinary cogging and chocking, that would be the work of the deputies?—The deputies put the chocks in. The man does not do that.

35730. That is the deputies' work?—Yes.

35731. When you suggested a separate travelling road, I think if I followed you rightly, you said in the roads now there have to be manholes laid and kept clear by the Act, of course: but that if there was a separate road some of this expense need not be incurred. In the main haulage roads it would not be necessary even to have manholes?—Not if they had a travelling way, because a man would not have any necessity to come out that way.

35732. In main haulage roads is it not necessary for men to be there?—In the repairing of it, in the usual heaving up of the mine, the natural pressure. Of course there are men going to repair, to put that right, certainly.

35733. An accident may happen, a wagon may go off the line, and someone has to put it on?—Yes.

35734. It would be necessary still to have manholes?—I do not see that it is so necessary, because these men who go in to do repairs go in at night when the wagons are not running.

35735. I will take it apart from repairs, in ordinary drawing shift. I do not know what is the custom with you. When the wagons are off and a man puts them on, he must have some place of refuge?—He is the man employed in doing that. He is what we call the wagon-wayman.

35736. It is necessary to have some place to go to when the wagons are started?—There would be place ends for him to go into, and he would know them.

35737. You have made the position clear that the men are opposed to fines in the colliery office?—Yes.

35738. It has been suggested to us that in the absence of fines you take the officials very much away from the colliery if you prosecute so much in Court. I want to put it to you after your length of experience in this matter, in your judgment and that of your friends, if fines in the colliery office were made illegal and you were compelled to take them before the Court, is it not likely that there would be less cases to go before the Court and less fines?—I believe in the end it would work its own cure. I mean the amount mulcted in fines and costs would work its own cure on the colliery.

35739. You think it does not command respect for the rules and the due observation of them that there would be if publicly punished before a Court?—That is my idea.

35740. Even if a workman favoured a fine you say it is not in the interest of the men themselves that they should be so fined?—I do not think that it is in the interest of safety.

35741. When you refer to a man neglecting his timbering in the rush and eagerness towards the close of his shift, you mean he wants to get another tub or two out?—Yes, that is my idea.

35742. In answer to Mr. Ellis you were both agreed you could hardly suggest a remedy for that sort of thing?—No. It is the natural bias and tendency of a man's mind.

35743. Do you think if all the collieries worked day wage it would remedy it?—If they did, it would do away with the eagerness.

35744. There could be a remedy found?—If you put it on day wage, but I have my own view as to putting piece-workers on day wage.

35745. This Commission has been told by representatives of the workmen that that is the cure for it?—There may be a worse evil than the cure, as far as that is concerned. I believe there is a natural tendency at work which will cure it.

35746. There is a serious loss of life from falls of roof?—Yes. There are a number of men who rush themselves into danger by their eagerness to make money; if their tub was not full they would lose it, and the end of their shift would come. Let me supplement that by saying, speaking for the Durham custom, if there were more deputies, by a closer attendance at every place, that risk of the men would be obviated.

35747. I understood the districts were made bigger than the deputies could attend to in places?—I would not like to give universal condemnation or censure or fault-finding, but there are places where deputies say they have too many men to look after.

35748. That, from the employers' point of view, is the question of cost?—Yes.

35749. Do you consider if districts were made less, or there were more men to attend to them, that much of this loss would be obviated?—I do not think the cost would be much greater, if any.

35750. With reference to workmen's inspection, you make it pretty generally in Durham under the rule?—I am sorry to say, speaking for myself, I do not think the men put it into operation as much as they ought to do. They do not take sufficient advantage of the Act.

35751. In no case have you objection from your colliery people?—Not the slightest.

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35752. You have said in your judgment, so far as you know, there is no man who would take advantage of it?—No.

35753. At any time your men can put that rule in force and make an inspection?—Yes. I was an inspector myself for a long time under the Act of 1872, and I never knew a man and have never known one since interfered with.

35754. We have had evidence given here that if this Rule was broadened and you were not confined to the men immediately in that pit, you might have more inspection. What is your view?—I speak only from my own experience in Durham. I do not think it would be expedient in every pit. There are always men competent to inspect, and these men would be selected by their fellow men in that colliery. If you brought a man from a neighbouring colliery he would be under the same terror, because the other employers might turn him off.

35755. Supposing you broadened that Rule so that the checkweighman might inspect?—I mentioned if he had been a workman, not "who are."

35756. The checkweighmen usually have been?—Yes.

35757. You could not see any reason why the men should be debarred from appointing their checkweighman?—When we discussed the Mines Regulation Act we asked for men who are or have been miners

35758. They always have regard to a man's up-to-date knowledge, and a checkweighman would have that, because he is in touch with everything?—Yes.

35759. (*Mr. Ratcliffe Ellis.*) The object of this inspection under this General Rule is to satisfy the men that the place is safe?—Yes.

35760. Do you not think that they would be more likely to be satisfied by two of their number who were going to work under the same risks, than by outsiders?—The outsiders generally chosen to do that would be the checkweighmen.

35761. Do you not think a man would be much more likely to be satisfied if the man who made the inspection was one who worked with him under the same conditions?—Are you speaking of the construction of the Act as it is?

35762. The object of this inspection is not the same as Government inspection?—No.

35763. It is to satisfy the men that the places are safe. Do you not think they would be much more likely to be satisfied?—No: I think the men, with very rare exceptions, have perfect confidence in the checkweighman. He has been, except on very rare occasions, a miner, and they look upon him as being a leading man and a man they can trust thoroughly. He has nearly always been a man who has worked in the colliery himself.

35764. Will you look at it from the owners' point of view. The checkweighman has a good deal to do with matters that are not connected with safety?—Certainly.

35765. You ought to have some regard in enforcing an inspection, which is not a Government inspection, upon an owner. Do you think they would be more likely to be satisfied by an inspection by two of their number rather than by a man who has other objects to serve than mere questions of safety?—Of course, when you speak of other objects, human nature is human nature, but I could never see why an employer should have a serious objection to a checkweighman inspecting a pit. I never could see it. Of course workmen, as well as other people have no monopoly of all the virtues or vices, but, generally speaking, I do not think there is any reason for being afraid of them. That was the idea I had when we asked for it to be put in the Act, and that is the idea I have yet.

35766. (*Mr. Smillie.*) You are strongly in favour of taking out those words "who are practical miners," and extending it to those who are or have been practical miners?—Yes.

35767. In a district of 2,000, 3,000 or 4,000 miners with, perhaps, six or seven collieries, and the men closely congregated together, might it not be an advantage if two specially able and well-known men were appointed for the whole district to make periodical examinations, and, perhaps, to do nothing else?—In that case they would be Government employées. They would be the class of men we suggest as inferior inspectors.

35768. Under Rule 38, if you are entitled to appoint persons who were or had been, you could appoint them from one colliery whether or not they were working at a colliery. You could appoint two miners' agents who had been miners to make a periodical examination?—To be only employed in going round the various pits in that ground.

35769. To devote part of their time to that, and part to the work of the Miners' Association?—So far as I am concerned, I would sooner let it lie with the choice of the men who are or have been miners.

35770. To appoint men from their own particular pit or any other pit?—It would lie with them as to the construction they put upon it.

35771. It has been put that men working in a pit have the best chance to know that pit and would make a fuller examination. Under the Act they are not entitled to visit any other part but their own working place in their working time?—You are not speaking of monthly inspection?

35772. No: a person may be employed in a mine in Durham and not know any part of the mine except the particular section in which he works?—In Durham the "caviling" system makes a man go all over the colliery.

35773. Every three months they change a man from one part of the pit to the other, and that gives him a fuller knowledge of the pit?—What would be of use in a case of explosions would be this, and I have had something to do with five or six of them. There should be an arrangement by which every man should travel the whole colliery once in every three months under the guidance of an official, so that if an explosion took place he would not have to depend upon the official, but he would know the mine himself. That is rather apart from the question.

35774. Would it not be a good thing that everybody employed on the ground should be instructed as to the return airways and the escape shaft?—Yes.

35775. Is it not a fact that at the present time many miners in the other counties do not know how to find their way about the mine in the event of anything taking place?—I do not know.

35776. Lives might be lost because of their ignorance?—Taking our own experience, there are very few coal getters who have been a year or two in the colliery who do not know the whole of the colliery. I do not speak of the returns, but I speak of the general working places because the "caviling" system every three months spreads the men about, and gives a man knowledge of the construction of the colliery itself.

35777. That gives them an advantage in Durham that respect which is not acquired in many other parts. In other parts it is the case that a man may work practically all his life in one part of a colliery without changing. That is so in some parts?—They get a general knowledge of the colliery by conversation with their fellow workmen.

35778. In answer to Sir Lindsay Wood you said that there are some mines in Durham, I think it was one of his mines, I do not remember the name, which might take two men a fortnight to inspect?—To inspect it properly.

35779. To make a thorough examination of it?—I speak now of Murton colliery where there are 2,400 or 2,500 workmen.

35780. A fortnight would amount to nearly 96 hours if working eight hours a day?—Yes.

35781. Under your Special Rules the deputy is required to make his examination two hours before the hewers start their work?—Yes.

35782. The deputies are expected to make a full examination in their own particular district of the roof and sides and all the roadways leading to and from—— ?—From the stations.

35783. In addition to all the faces?—Yes.

35784. In a colliery such as this, which would take a fortnight, how may deputies are there employed?—There is a very large number, I could not tell you how many.

35785. There would be 40 or 50 perhaps?—No, far more than that.

35786. Supposing there were 40 or 50 in a colliery of that kind, if it takes two men a fortnight, and I have no doubt it would, to make a thorough examination it would take 48 deputies, devoting their whole time and doing nothing else, to make their morning examination?—Yes.

35787. The Special Rule says two hours?—It must be inspection within two hours, but he may not have two hours.

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35788. Do you think in a fiery district such as Durham is, that it is safe to have an examination made two hours before a workman goes in?—They do not make their examination every two hours.

35789. Under the Special Rules they may make an examination of some places?—Yes.

35790. I want to deal with the Special Rules as they are, because they would allow the thing to be made in two hours. Do you think it safe that a place should be examined two hours before a hewer goes down?—For gas, do you mean?

35791. Yes, for gas or anything else?—I think something must have taken place if the deputy found gas two hours before the men went in, if it accumulated sufficiently to make it dangerous. Something must have taken place with the ventilation, and it must have been a gassy mine to exude so.

35792. I think your system is what is known as pillar and stall?—We have three systems in the virgin coal: we have the longwall, the pillar and stall, the board and wall, which is a peculiarity of Durham. It is a board and a stall pretty much, but rather a narrower place.

35793. The longwall system where it is worked to any extent usually has a continuous creep on?—It is pillared up.

35794. There is creeping?—Yes, in all mines.

35795. Especially in longwall as compared with pillar and stall?—Yes because the coal is all taken out. It is sure to be so.

35796. There might be a serious breakage in the roof within two hours?—Not between the pillar and the face.

35797. Why?—The pillarers put in the pack walls. The cavity is filled by stones taken from the face or brought some distance.

35798. A break usually takes place at the face right at the coal head. Are you not aware of that?—No, not the break. It would be if it broke the timber down. There might be exceptions, but I do not think you will find that very often.

35799. May we take it that 75 per cent. to 80 per cent. of the lads in Durham mining centres will find their way to the pit?—Do you mean the lads employed about the pit?

35800. I mean the lads who live about the pits?—You mean whose fathers are miners?

35801. Yes.—I think you may safely say that there is nothing else for them to do.

35802. I suppose I may take it that it would be well if some knowledge from the dangers from gas in mining, and some knowledge of ventilation were given to the lads before they went down the mine?—I am Chairman of the Durham County Council, and I know this, that there are ining classes wherever they will adopt them, and there would be more if they were adopted to teach boys purely mining.

35803. For lads under 14?—Any lads who like to go.

35804. Lads under 14 who are attending day-school are not likely to attend evening classes?—No.

35805. Do you think it would be time well spent during the last two or three years of a lad's attending school to give him some knowledge of chemistry and mining?—Yes.

35806. And perhaps a knowledge of the Special Rules. He would be expected to know them?—Yes.

35807. So far as you know, the Government or the Education Department have not made any provision for that at present?—I know that. I think if some instruction were given at some period of the day when these young lads are intended for miners, it would be money well spent. There are the technical schools, the secondary schools, and evening classes, but that is after they leave the elementary schools.

35808. There is no doubt that there is a considerable danger to lads who are underground for the first time unless they are closely under the supervision of a skilled person, because of ignorance, they may perhaps go into danger?—They do not go anywhere where a knowledge of chemistry or mining generally is required. They are generally put into some place where they are under supervision, and where they come into connection with some other boys older than themselves. So far as chemistry is concerned and the science of mining, it is unnecessary for them at that particular time, but it is necessary later on.

35809. What do you say with regard to a knowledge of the Special Rules and Coal Mines Regulation Act?—That would be all right. I do not see that it would do any harm.

35810. Your lads do *not* go directly to the coal face in Durham?—No.

35811. They do day-wage or on-cost work first?—Yes. they are knocking about generally, keeping doors or incidental work until they go up for drivers, and other kinds of work.

35812. In large counties, where they go generally directly to the coal face, there is all the more need for them having some knowledge of gases and ventilation?—Yes, I should think so.

35813. You would not have any serious objection to the third grade of inspectors which you propose holding a first-class certificate?—No.

35814. Providing it carries with it practical experience?—Certainly; that implies he would have the second if he had the first. The greater always includes the less. He would be more qualified. I would make it a *sine qua non* that he must have practical experience.

35815. Other things being equal, theoretical knowledge and everything, the miner with the practical experience would be the better man of the two?—Yes, he is bound to be.

35816. I daresay there is sufficient intelligence and push now amongst the miners generally to secure a first-class certificated man to supply a third grade of inspectors?—I know you could supply a corp many times over in Durham, and I am sure you will find the same thing in other counties generally.

35817. On the question of fines, supposing it came to your knowledge now that in Durham there was a systematic and very extensive system of fining, the fact that you are in ignorance of it as Secretary of the Durham Miners would make it all the more necessary that it should not be so?—We should try and stop it.

35818. I find that Mr. Bain put it here. He gives the case of eight collieries, and he is dealing really with fines imposed by the managers; he gives eight collieries in which there were 341 fines in one year?—These are things that neither my colleague nor I, nor any official could have any cognisance of. If a man is caught in anything that is wrong and the manager says, "Instead of turning you off I will fine you," and he accepts the fine without giving us notice of it, we do not know anything about it. I am speaking of our knowledge and supervision of things; we are against fining.

35819. It is rather a serious matter that this is going on, and as a matter of fact it has been kept away from your knowledge?—When a man submits to it without reporting to the officials of the colliery, that is our officials, and makes that arrangement, we cannot know anything about it.

35820. The fact that it has not become public proves that it has not the deterrent effect it would have if there had been a prosecution in court?—There are too many. There would not have been 341 in court.

35821. (*Mr. Ratcliffe Ellis.*) A list of fines has to be kept for the inspector to see?—Yes. I think I understand your question. In your opinion the 341 are not enough to prevent men breaking the Special Rules. Do you ask me if there were 341 in a law court, would that have a better effect? If so, I believe it would.

35822-3. (*Mr. Smillie.*) Yes, that is my point. If those had received the publicity of a law court prosecution you would have known all about it?—Yes. Eight collieries, 341 cases, you say.

35824. (*Mr. Enoch Edwards.*) They may not be breaches of the Rules?—No, they may be something else.

(*Mr. Smillie.*) Mr. Bain put it that they are all breaches.

(*Chairman.*) We do not know how many of those are fines by agreement, and how many are fines inflicted by the management.

(*Mr. Smillie.*) He only gave 95 prosecutions.

(*Chairman.*) It is clear the great majority of fines are fines inflicted voluntarily.

(*Mr. Smillie.*) Yes.

(*Witness.*) That is at the rate of about 45 for a colliery.

35825. At one colliery there were 108, at another 37. at another 63, and then I see 18, 11, 45, 48, and one large colliery he says does not fine at all, but always prosecutes, proving that what he is dealing with is fines at the colliery. I daresay you would not be prepared to pass a law placing it in the hands of a mines inspector to fine a manager for a breach of the Coal Mines Regulation Act?—He is fined now, is he not?

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35826. You seem in one of your answers to the Chairman and Mr. Ellis to disagree with Mr. Bain, but I think you agree with him. Mr. Bain had stated that the men would prefer being fined by the manager, and you disagreed with that. Mr. Bain meant the individuals who were caught would prefer to be fined by the manager ?—If you speak of the men collectively, they would not.

35827. The Durham miners as a whole do not believe in the fining system ?—Not for violation of Special Rules or the Act of Parliament.

35828. The individual who is caught would naturally prefer to be fined ?—It is in this way: he is told by the manager, "If you will accept a fine you may stop on, but if not I will dismiss you," and he takes the lesser of the two evils in his opinion.

35829. If you are to have discipline, and where the lives of the men are concerned, you ought to have it, you think prosecution before a magistrate is the best method of securing it ?—Yes, I think it is. It has the best deterring effect.

35830. You have not been asked whether you think there should be certificates after an examination for deputies. Do you think it would be wise that deputies should have a certificate ?—I think it would be a benefit all round.

35831. As a general rule you have no fault to find with the class of men who are generally deputies for Durham ?—No.

35832. You have known deputies who are thoroughly skilled practical men who could not have passed a theoretical examination ?—I have known some of the best managers in the mines of Durham who, before the Act came into force, could not have passed an examination in anything.

35833. That did not prevent Parliament passing that law ?—No.

35834. Is the position of a deputy most important so far as the question of safety is concerned ?—Yes.

35835. Would you go the length of saying it is more important from the safety point of view than even that of the general manager of the colliery ?—Yes; the general manager gives general instructions as to what he wants done specially, but the general safety of that flat is under the deputy.

35836. The deputies are generally there in the morning before the manager puts in an appearance ?—He comes in at two o'clock in the morning and the other one comes in about nine.

35837. In view of the fact that we have so many intelligent practical miners who hold first and second-class certificates, there would be no difficulty in getting sufficient deputies with the necessary qualifications who could prove by examination that they were fit ?—They could prove it by a scientific examination.

35838. It might not be required to be so stiff as the first or second class ?—It takes a man with a lot of adaptability to make a deputy.

35839. Upon the deputy depends the safety of that mine ?—Of that flat.

35840. Is your deputy responsible for seeing that the material is got out of his particular district ?—The coals ?

35841. Yes.—No.

35842. He is not in any way responsible ?—No.

35843. Is he responsible for the roads being kept in order ?—Yes, the tram roads.

35844. Supposing a tram or a train of trams, if you have them—— ?—They go single tubs.

35845. Supposing a single tub goes off the road, and he has gone out to assist, he has to repair the road, if required ?—He would have his hammer or axe and nails with him. They generally carry them about with them.

35846. As a matter of fact, under your Special Rules there are 14 rules applicable to his duties ?—Yes.

35847. Those rules apply to looking after ventilation, all the doors and tramroads and other things in his district, in addition to timbering work ?—In his district. He has done with the ventilation after it gets into the return airway. It may be in his district when it has left him.

35848. You could not give any idea as to the number of men which a deputy may have under his charge ?—It varies according to the stone. Some men follow 18 or 20, some 10 or 12. It depends upon a variety of circumstances.

35849. Your deputies generally who are also timbermen, must be skilled timbermen and miners before they know how to put up timber ?—A manager knowing what he has to depend on should pick the best men.

35850. A thoroughly skilled deputy with practical experience and knowledge would be as good a timberman as you yourself would have been ?—Better.

35851. Although sometimes you would have preferred to put up your own prop, because you know where it is convenient ?—Yes.

35852. That is not because the deputy is not a thoroughly skilled man ?—No.

35853. You are favourable to the deputies still being kept responsible for the timbering ?—Yes.

35854. Always leaving the miner responsible when the deputy is not there ?—That is the Special Rule, you will find.

35855. You have no fault to find with your engine-winders in Durham ?—No. I could not tell you of any. I could not even hint at any fault to find with the engine-winders.

35856. You have given as your own personal guarantee from your knowledge of engine-winders as a class that they are a very estimable and intelligent class of men ?—That is my unhesitating opinion.

35857. Have you thought over the question of whether it might be well that there should be certificates to prove their competency ?—Yes.

35858. Are you favourable to that ?—I have thought so much about that that for over 15 years I have tried to get a Bill through the House of Commons, and I am going to ballot next Wednesday for it again.

35859. Your long experience justifies you in saying that engine-winders should hold certificates of competency ?—I think they ought to have them.

35860. Do you say they should be confiend so far as possible to their own particular engine and their own engine-room, and that other duties outside of their engine-room should be taken off them ?—I cannot imagine an engine-winder going out of the engine-room at all when his engine is working.

35861. Well, while it is standing ?—If there is no need for him to be there. Take a week-end when the pit is off. There may be something an engineman could do, and he might be asked by the engineer to do it, but that will be when there is not any demand for the engine to do anything.

35862. You would not think it wise, where there are two adjacent collieries and men underground in both, to leave one engine-winder in charge of both engines ?—It depends upon how far they are off, and whether they go to either engine to come to the bank. There must be an engine-winder there while people are in the mine.

35863. If two engines were so far away from each other there might be a difficulty in distinguishing the sounds of the signal bells ?—It is not left to him; there is a banksman at the bank.

35864. At some mine there is no banksman ?—There is still a man there.

35865. The law does not provide that there must be a banksman ?—I think you will invariably find that there is.

35866. I invariably find that there is not ?—I do not speak of Scotland. I could not understand if an engine is a long way off taking them away and you might expect some raps from the pit he belonged to, especially. I thought your question was put generally; a man having an engine standing and not being required for hours, whether, if required by the engineer to do something out of the engine-house, he should do it. Well, that is a matter of arrangement, and could be taken in hand by the engineer.

35867. That is not the point ?—Taking two engines at distances, I cannot see——

35868. You are not in favour of the engine-winder having charge of his own engine, to wind men and materials, and also a haulage-engine in the same engine-house ?—Not while the winding-engine is at work.

35869. During the time a man might be in the shaft the bell might ring to stop the haulage engine?—If anything happened to the hauling down the pit, and it depended on getting it stopped, and a rap came, he could not leave the winding-engine.

35870. It would be well to have the winding-engine and nothing but the winding-engine ?—Yes.

35871. With regard to coroners' inquests, you have little or nothing to complain of in Durham ?—Nothing.

35872. You have, from your own experience, heard of cases where coroners have not treated you with much

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courtesy?—I think I could tell you of instances, but not in our own county. I have no personal complaint, but rather appreciation of the freedom they allow.

35873-4. Section 48, Clause 8, gives the power to the majority of the workmen to appoint, by an order in writing, a representative to attend an inquest. Supposing a coroner interprets it that the majority of the workmen individually must sign that authorisation, that might be very difficult to get done sometimes?—It would be difficult at all times if an inquest came on in a hurry.

35875. That construction could be placed upon that clause, and has been placed upon it?—Yes.

35876. A coroner has objected to a person appearing where he has not had the authorisation of the majority of the workmen?—I have never known a single case of a coroner in Durham asking for an order. I was at the Altofts explosion, and I know there that the coroner demanded a certificate from the representatives of the men before he would allow them there. He asked for the certificate.

35877. A certificate signed by the majority of the workmen, did he say?—No, signed by the relatives.

35878. If that is really the construction placed on the present clause, is it not necessary that a change should take place?—Substituting something else for the majority of wo kmen.

35879. An order in writing of the majority of the workmen. It should be sufficient if a coroner had information that at a meeting of the workmen a person was appointed by the majority?—Still, the coroner would require some guarantee in writing, not verbal, that this man was appointed.

35880. Supposing he had a certificate in writing by the person who presided at the meeting, would that do?—Perhaps the meaning is the majority of the meeting. It does not say that.

35881. Coroners have held that it is the majority of the workmen in writing?—Yes.

35882. That might prevent a person getting it. Have you any difficulty in Durham with regard to unskilled persons being employed?—No, we have not any. The only instance I can remember was one we had the other day, but he was working under the care of a skilled workman.

35883. You have not had two unskilled persons working at the face together?—No.

35884. Might I ask your opinion as to whether the employment of an unskilled person is as safe as the employment of a skilled person?—There is only one answer to that question, and that is No, he would not be: he could not.

35885. I suppose being unskilled, a want of knowledge of the English language would be a serious drawback to the safety of a person?—He would have some difficulty in making himself understood, especially to a Scotsman, anyhow.

35886-94. And by any Britisher, I suppose, I might take it?—Yes.

35895. (*Dr. Haldane.*) We have had complaints from other districts that the under-officials in some of the mines are not very capable, and that they are badly paid, and paid less than men working at the face?—I really cannot tell at all.

35896. I wanted to ask you for information about the Durham district. Does such a thing ever happen?—I do not know anything about the payment of the officials. I do not know their wages, neither can I, so far as I am concerned, give any objection to the capability of any official in the Durham coalfield.

35897. You cannot tell whether the deputies are paid badly?—The deputies' wages would be now about 7s. a day, with free house and coal.

35898. They are never less than that, but they may be less than a coal hewer?—No, they are always more.

35899. Do you say that as a general rule?—There is a fixed average wage for deputies, plus percentage, and the deputy's basis wage is 6d. a day higher than a coal getter's wage.

35900. That is the custom?—Yes. My colleague has just handed to me a list of the wages. For the deputies the basis wage is 6½d. above the coal-getter's, plus percentage.

35901. The complaint is they do not get the best men?—I have said sometimes a man has a cousin. To speak of things generally, I have no complaint, and I have not heard of any. There may be cases that do not come within my knowledge.

35902. Do you think, as a general rule, that the men in the Durham district have fair facilities for getting themselves clean when they get home? Have they room in their houses?—They have the facilities their forefathers had, but they were not a dirty class. I believe the bath might be attached to every house with advantage to all.

35903. They are not just now?—Some of the houses are very small, far too small, and against that we make complaint. In Durham there has been a gradual reformation ever since the Local Government Act was brought into operation, and the new houses the owners are building are very much larger, and no fault can be found with them. At one new colliery they have put a bath to every house. I would suggest that, from an employer's point of view, as a matter of economy. The men would be far more vigorous if they could be bathed, but the convenience for washing in a small house is not great. It cannot be—greater facilities should be given.

35904. Would it not be a more expensive thing in general to provide baths in houses than at the pit-head?—In building a new house it would take a very small place to make a bathroom. There is one thing the colliery owners have in Durham: they are not much troubled with ground rent. Under our system, which is a free house and coal for the workmen, with the exception of rent for those who cannot get free houses, with very rare exceptions the owner could attach to his houses some small bathroom. That is my idea from the point of view of cleanliness, vigour and economy, and I believe in it myself.

35905. One difficulty with regard to the baths is the water supply?—Our county is covered with ordinary water companies.

35906. Is it possible to get soft water?—I think so. The water we get for our home consumption is a very soft class of water. There may be collieries where it is pumped out of the mine, from the feeder, and it may be harder in its component parts, but speaking of the general water supply of Durham gathered from the hills into reservoirs it is soft.

35907. (*Sir Lindsay Wood.*) You are speaking of the western part of the county. In the eastern part of the county the water is, generally speaking, hard?—The Sunderland Water Company has supplied at Wingate. When I spoke of the softness of the water I was speaking of the western side. It comes down to Durham and a little on the east side of it.

35908. There is often a scarcity of water in the west of Durham district, more than in the eastern district?—In droughty times, you mean?

35909. Yes?—Scarceness of water would arise anywhere whether there was a bath supplied to everyone or not in droughty times.

35910. (*Mr. Smillie.*) Is there a large proportion of your workmen in Durham who travel any distances by train to their work?—I only know one place, but I should like to reserve the correctness of my answer. That is from South Shields to Marsden.

35911. How many miles, roughly, is that?—About three miles.

35912. If there were any places in Durham or elsewhere where the miner was required to travel 10 or 12 miles to his work, that would make a considerable difference as regards the necessity of washing at the pit?—You are asking me something the workmen in Durham never dream of.

35913. In our district many men travel 10 miles by train, and they are working wet in the pit?—We do not. Our houses are generally congregated about the pit.

35914. Where men have to travel 10 miles in wet pit-clothes, it is very uncomfortable?—You might take half a mile or three-quarters of a mile as the average distance. In the case I have quoted from South Shields to Marsden that is not the ordinary distance. I do not know of any other place.

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35915. (*Chairman.*) I believe you are Member of Parliament for Gateshead ?—Yes.

35916. You have heard what Mr. Wilson has been saying ?—Yes.

35917. If you disagree with him in anything we shall be glad to hear, or if you wish to amplify his evidence or give any other evidence of your own upon the points touched upon, we should like you to ?—I agree with all Mr. Wilson has said. I have listened very closely to all that has been said, and I think I may say "Amen" to all that has been said. If there is any other question you wish to ask me I shall be pleased to answer it.

35918. I do not know whether there are any points which were not dealt with by Mr. Wilson which you would like to mention to the Commission ?—No, there is nothing.

35919. (*Mr. Ratcliffe Ellis.*) You heard my questions to Mr. Wilson and you agree with his answers to them ?—Yes, I do.

35920. Mr. Wilson said with reference to certificates for engine-winders that he had brought in a Bill from time to time in the House of Commons for the purpose of granting these certificates ?—Yes.

35921. You are aware, in connection with the Bill, at one Session it was referred to a Select Committee ?—Yes.

35922. The Committee did not report in favour of the necessity for such a Bill ?—No.

35923. The engine-winders at present, I think everybody agrees, are a very excellent class of men ?—Yes.

35924. There are occasional accidents which happen—but very occasional, fortunately—by the engine-winders ?—Yes.

35925. Are you not aware that those accidents are usually the result, not of incompetence or want of skill, but either from want of care or some temporary loss of memory ?—They arise from various causes.

35926. Do you think that a certificate would cure that ?—I think you would get better trained men, and if you had a man who had a certificate you would know that that man was competent.

35927. Yes, but a certificate would not prevent carelessness or this occasional loss of memory ?—No, certainly it would not prevent accidents altogether, but it would be an indication that you had a competent man. He is, on the face of the certificate, competent.

35928. As a matter of fact now, the fact that there are practically no accidents happening as the result of want of skill does not look as if the absence of a certificate is a matter of much consequence ?—If you have a man who has served his time and who has got a certificate, there is a competent man when you want him. You have not a man coming to the place who may not have served his time. A man may not have had experience, but someone says, "I think he is a good man." If he has a certificate you know that he has had the training and experience.

35929. In case it was made obligatory, would you be prepared to go as far as this, and say that no man should be entitled to wind men who had not a certificate, in case any difficulty arose in getting a man with a certificate to wind, but that it should be competent for the Home Office to permit men to wind who had not got certificates ?—I do not follow that. I think you can find plenty of men.

35930. Supposing there is some difference or dispute, and the men say, "we will not wind except upon certain conditions." Would you provide that the Home Office, on proper inquiry, might prevent access being refused to these mines, except by men who had certificates ?—You put it to me if there happened to be a dispute by the persons who were certificated persons, and the dispute came to a crisis, would I put another man in there. I would be disposed to advise other people not to do it.

35931. Supposing the Home Office were authorised under certain conditions to permit winding by an uncertificated man, do you think that would be reasonable ?—No, because you want the men in the place to have confidence in the man. I went to an inquiry not long ago at one of our places where there had been a little mishap. There was a quick-moving engine which pulled the cage up on pulleys. The man had never had an accident before, and there was a little fear about the matter, but the men said, "We have confidence in this man; it is simply for the moment an accident, a lapse of memory, or some other thing"; but if you were putting an incompetent man without a certificate to wind them, they would demur, because their lives are very valuable commodities.

35932. At the present time all these men are admittedly very competent men. There is not one with a certificate; therefore I do not see it would follow in future that no man could be competent unless he had got that certificate ?—We want to strengthen that competency. If now they are very careful, and we make no complaint with regard to them, we want to make assurance doubly sure by having an attestation of competency expressed in the certificate, saying that the man has sufficient experience, and therefore that he is a competent man. That would give greater confidence to the men.

35933. (*Mr. Smillie.*) Do you agree with Mr. Wilson as to the advisability of having certificates for deputies ?—Yes. Mr. Wilson did not put it to the extent of having a manager's certificate.

35934. A certificate proving that they have the theoretical knowledge which is necessary, you agree with ?—Yes.

35935. You would apply the same thing to competent persons under the Explosives Act as shot-firers and people who handle explosives ?—People who handle explosives are only responsible for the explosives. They are not responsible for the ventilation and general overseership of the mine. They are shot-firers whose only business is to look after the batteries in firing the shots. The deputy has general supervision of the flat or district and the ventilation, and therefore he is responsible. The fireman is only responsible for the efficient manipulation of the shots.

35936. In recent years there has been an increase in the number and nature of the explosives ?—Yes.

35937. The high explosives or permitted explosives are admittedly in many cases more dangerous than the old powder ?—That may be.

35938. They are ignited by detonators which are highly dangerous ?—Yes.

35939. It would not be safe to put into the hands of an incompetent person who had no skill, detonators and explosives ?—No, that would be a matter of experience and management. It would be for the management to find out whether they thought a man could do it, and in that case every man would have to have a training. He would have to have a training before you could find that out. You must have a start, and everybody at the beginning would not be so competent as they would after years of experience.

35940. If you were told that in many cases, in a number of cases at least, persons who were in receipt of compensation had been started as shot-firers and persons to handle explosives as an easy job, not because of any skill they had, would you consider that a competent man ?—No, decidedly not.

35941. Can you tell us whether there are any or many of your collieries in Durham which are specially supplied with safety catches ?—That I could not answer; there are some, but I could not tell you them.

35942. Have you any in your mind just now ?—No.

35943. Do you know whether or not there are any of your engines in which there is any regulator which would stop the engine in the event of anything going wrong with the engine ?—I only know one, but there may be more. I was in an engine-house recently, and they explained to me—it was a new engine—that there was a process by which the engine automatically shut off the steam and applied the brake.

35944. Do you know if that was called Bertram's Visor ?—I do not know the name, but it is one of our latest pits.

35945. If there is anything which could be attached to every engine which would prevent overwinding in the event of anything going wrong with the engine, do you think it would be wise to have it applied ?—Yes, I think it would be very wise indeed. I understand there is one in respect of electrical engines, but I did not understand that it was so with regard to steam engines until this was explained to me a few months ago.

35946. (*Chairman.*) Do you wish to add anything ?—No, there is nothing, except this. I agree with what Mr. Wilson said with respect to ambulance and certificates. I may say that in Durham I happen to be on the Board of

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Examination, and we had this question up at our Board, and we suggested to the Home Office that men going in for manager's certificates should have some preference, by so many marks, if they were competent in ambulance work, say 10 or 12 marks, as the case may be. I think it would be a very good thing, too, for a deputy as well, because the manager is only at the face sometimes, but the deputy is always there.

35947. It is more important, in your opinion, that the deputy should know about ambulance work than the manager?—Yes, I think it would be important. In my judgment, the deputy should know something about it, at all events. I think it would be a good thing to get them to recommend it.

35948. (*Mr. Cunynghame.*) I have only just heard that you are on the Examination Board, and therefore I should like to ask you a question upon that. It has been suggested in some districts that the certificates are got more easily than in others. If you fail in one place you can go off and get a certificate somewhere else?—So I have heard.

35949. Would you be in favour of a workable scheme for making the certificates as uniform as possible?—I think I should. I am informed that the Newcastle district is a very hard district.

35950. I have heard that some districts are harder than others?—Yes.

35951. Do you think that some improvement might be obtained by the following scheme which I will outline. If a paper were set a certain number of times a year and were uniform through the whole of England, and that were set by a Board of Examiners appointed by all the Boards in the Kingdom, and you took care that there was always somebody on the Examination Board to set the question, who represented the words and customs of the district, so that the paper would be fair for the district, and that were supplemented by a satisfactory oral examination with the object of giving the men who did not express themselves quite so well on paper a chance of showing what they know—do you think a scheme of that sort would work well?—I think it would be well to have some uniformity. I think there is a great deal in the present test of having the man before you.

35952. It is not suggested you should not have the man before you, but only that a part of the examination should be a uniform paper set all over England, so that you could see the thing is uniform for everybody.

(*Mr. Smillie.*) Why leave Scotland out of it?

(*Mr. Cunynghame.*) I mean including Scotland.

(*Witness.*) I think that there should not be different grades of examination in different districts. I think the examination should be as uniform as possible, unless there may be in certain districts certain specialities.

35953. It would be necessary to call a thing by one name in South Wales which you would call by another name in another district, and care would have to be taken not to make an examination unfair from that point of view. Otherwise, as a member of the Examination Board, you do not see any difficulty in the method adopted at South Kensington, where the papers are sent out in sealed envelopes at a certain hour on a certain evening, and the examiners of a certain district could open them, distribute them, and send the answers, which would be sealed up. By doing that at the same hour on the same day no one can communicate with anybody else?—It would be a good thing, because they often get to know the questions.

35954. I do not say I adopt the scheme, but I think there is something in it. There would be a Board of Examiners appointed by the Examining Boards in the district.

(*Mr. Ratcliffe Ellis.*) Would the papers go back to be marked in London?

(*Mr. Cunynghame.*) They would go to the Board of Examiners. There would be a chairman, but certain questions would be answered by certain men. They would be distributed as they distribute them at South Kensington.

(*Witness.*) They would be marked here?

35955. They would come to a central authority?—They would mark the district and take into consideration the candidates and their age. They are really examined, as a matter of fact, by experts, four or five specially appointed to allocate the marks and report to the Board their findings.

(*Mr. Smillie.*) That is the present system.

35956. (*Mr. Cunynghame.*) The papers should go down from London. At present they are made by the examiners in the district?—Yes.

35957. (*Mr. Ratcliffe Ellis.*) These come down to Lancashire and then they are opened. The candidates are there, and these papers are submitted to the candidates, and they write up the answers to the questions?—Yes.

35958. Are those questions sent back with their answers to the Centre, and the value of the answers given? Are the marks given there, or are they marked by the examiners in each particular locality?—Are you speaking of what ought to be done?

35959. Yes.—I say there should be a certain specialist in each district. Newcastle and its district may have differences, and you would fail to have uniformity by having the questions sent from London. There would be no insuperable difficulty to have a central district, such as Newcastle and Darlington. They could frame questions that could be set before the several Boards in that district with great advantage.

35960. (*Mr. Cunynghame.*) I want to make it clear. The essence of the system I am proposing is that one Board of Examiners should act for the whole country, inasmuch as it is impossible to be sure that the marks are allocated upon a uniform system. You may get one Board giving 50 marks for a paper, and another Board may give 90. Unless you get some form of central system it is impossible to be sure that the marks are allocated in the same way in all the districts. I was suggesting a Board of Examiners allocated by the Examining Boards of the whole Kingdom. That would be a sure way of getting a representative one. When five or six men are appointed to make the examination they should examine for the whole Kingdom in the same way as the City Guilds and South Kensington?—I cannot see why there could not be what you suggest.

35961. I am endeavouring to provide that on the Examining Board one examiner should represent Newcastle and another South Wales, and another Scotland, and so on, so that the paper would go before the Board of Examiners and each man representing a particular district would take care the question was right as regards his district. That is the idea.

(*Witness.*) Therefore your questions sent to the several districts would not be uniform.

35962. (*Mr. Cunynghame.*) The different terms could be given; it could be explained, for instance, that in South Wales a holing prop is known as a sprag. The examiners, if you had one representing each district, would take care that the paper was fair for his own district?—There is this objection, which is much more important than the mere technical terms. Take the different work, the board and pillar work, for instance: it would have to be made clear. Suppose a man was told to ventilate that district, you would have to put an ideal district before a candidate of which he had experience and knowledge, or he would know nothing about it. If asked to ventilate a district such as you get in South Wales, he would say "I do not understand it."

35963. The examiners would put "This question is for the Cornwall district." You must trust your examiners to keep that clear, the object being that the system of working should be uniform throughout. You get a scientific side of the examination, at least, which would run uniformly through the whole thing?—I sympathise very much with you.

35964. You have pointed out the necessary qualifications, and one must take care in seeking after an ideal not to lose sight of them?—Yes.

35965. Would you have sufficient confidence in the Home Office of the day or the Secretary of State to empower him to lay down some system of conducting these examinations? It could be made flexible, and errors corrected?—I would be bold to say I had not confidence in him, but there is a great deal in having examiners that understand the nature and qualifications of the district. I sympathise with the central idea of uniformity. I do not think a man should say to Newcastle "If I do not pass I will go to Manchester or Scotland."

(*Mr. Ratcliffe Ellis.*) Do you not think that there might be two parts to the paper, a scientific part which would be applicable all over the Kingdom, and another part more particularly applicable to the different districts?

35966. (*Chairman.*) I would suggest that the paper which was sent round to the various districts should not be identical, but equivalent?—I think so. Then the trouble would be to get a uniform number of marks because your questions would differ.

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35967. By "equivalent" I mean this. Take the particular case of ventilating a district. There might be a number of questions for each district in this paper dealing with ventilation, and you would deal with ventilation differently in each district, that is to say, you would ask a person to ventilate a district he knew of in each district, and consequently the papers could not be identical? —Yes.

35968. It might be equivalent, or nearly equivalent? (*Mr. Smillie.*) No person should hold a certificate who could not ventilate any of the three systems.

35969. (*Chairman.*) A person in Newcastle has only a knowledge, as I understand it, of a certain kind of district He would not understand the way in which you would ventilate a district down in Cornwall, apparently. That is the suggestion. With regard to questions of ventilation you must make those questions to a certain extent local? —My idea is for the candidate to have it clear to his mind that you want him to ventilate according to a certain system in a certain district. He might know the kind of ventilation theoretically, but he might not know the system in another place, not having a practical knowledge of it.

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Mr. ANDREW SHARP, called and examined.

35970. (*Mr. Enoch Edwards.*) I understand you represent the Cumberland miners?—Yes.

35971. You are the Agent and Secretary for the Cumberland miners, which office you have held a great many years?—Thirty-four years.

35972. You are a Cumberland man?—Yes.

35973. You have had many years' experience in the Cumberland mines?—Yes. I worked about 23 years in the mines, about seven years as a boy at all classes of work, and about 16 at coal-getting, drifting, sinking and deputy work.

35974. What have you got to tell the Commission. What is your view with regard to inspection under Rule 38?—That is the inspection by the workmen. That is carried out at several of our collieries almost monthly. Some collieries now do not carry it out so often, and some only carry it out occasionally, when probably an accident of any description happens, or there appears to be any danger or any complaint with regard to ventilation or any other matter in connection with the pit.

35975. Have you ever experienced any difficulty in carrying out this Rule with the colliery people?—No, I do not think there has been anything that could be traced directly against the men for carrying out the Rule. They generally get every facility afforded to them to do so. I do not think we can trace anything directly against them, but a manager can find many ways of dismissing a man without being direct.

35976. Do they usually report the result of their inspection afterwards?—Yes.

35977. Is that report left at the colliery?—Yes, and a report given to the workmen at the lodge meeting, or sent to the workmen, and put in a book which is kept by the Lodge.

35978. What are the views of your people upon the possible inclusion of checkweighmen to inspect mines as a rule; now there is usually a man selected from the pit?—We think that rule ought to be improved so that workmen might either be taken from a neighbouring colliery, or practical workmen who have ceased to work in mines could be employed for that purpose. We think it would be better if practical miners could be taken from any part of the district. They would be more independent.

35979. You still hold the view that they must be practical men?—I do not see how an inspection could very well take place unless he was a practical man.

35980. If he had had practical knowledge of working the pit, but you would not consider a man a practical man who had been in some other business for 20 or 30 years?—I say if he has been a practical pit-man, no matter if he has left the mine and retired.

35981. (*Mr. Ratcliffe Ellis.*) Supposing he has kept a shop?—Yes, as long as he has been a practical miner.

35982. (*Mr. Enoch Edwards.*) The men would rather prefer a man who had up-to-date practical knowledge, a man who understands his business?—I think they would select them. If left, they would select those men. They might probably select a man from some other colliery, but I do not think they would go outside of men actually working in the pits, if it was left to them.

35983. You see no reason why the rule should not be broadened so that they may select their men from other pits?—We have some very good checkweighmen, who would be good practical men. They might appoint them.

35984. Now I want to have your observations with regard to inspection by officials?—I think that the inspection by the officials prior to commencing work in the morning is not done as efficiently as it ought to be. In many cases, with the area that the inspector has to go round, he cannot possibly give attention to matters which he sees in his way, or ought to see in his way, as he could if there was a certain area. If it could be decided upon as to what was a reasonable area for a man to inspect, that ought to be done. Only a few months ago we had a case where a boy was killed, and the fireman admitted that he saw this a few days before, but he had not time to go round the area owing to the quantity of places he had to inspect. He could not do it in two hours.

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35985. The area was too big for his inspection?—Yes.

35986. You are referring to the inspection that takes place by the fireman before the commencement of the shift?—Yes.

35987. One of two things have happened: either the area is too big or the deputies are too few?—Yes.

35988. In your judgment some of these accidents happen because of the inefficiency of the inspection that takes place?—No. I think if the area was smaller, if it was judged what he could do, he would see the various things that had happened. If he had time he might be able to find many defects he is not able to find at present, with his speed.

35989. He is too hurried?—Yes.

35990. It could be met by appointing more deputies over an area, or making their district less, so that they could get round it?—Yes. In fact, in certain mines I would recommend it would be better if there were two deputies and a portion of the way they might go together, to be within a reasonable distance of one another, because many things may happen to one man, of which we have had cases. Not so long since we had a man who kindled some gas by himself. They did not know till the men went in in the morning. In a wide area in some of our pits it would be better to have two, and arrange the distances between them, so that they could easily get to one another if anything happened.

35991. Was the man going round with an ordinary safety-lamp?—He had an ordinary safety-lamp, but how he got burned is the question.

35992. You suggest that he lit the gas?—I cannot say.

35993. He was burned?—Yes.

35994. The inspection was being made with an ordinary safety-lamp?—Yes.

35995. He was the ordinary deputy in the early part of a shift?—Yes. He never got out, and when they found him he was burned and had been injured.

35996. Was there any explanation ever got of how it happened?—That is a matter that comes up rather in a question I want to say something about with respect to prosecutions and accidents. Unless a man is killed, we never get any particular details of what happens. You hear vague statements, but if a man is killed there is a coroner's inquest, and then we get the facts.

35997. If there is an accident, and a man gets burned or injured, you get no statement or evidence except you know the fact that the man has been burned. Beyond that you get nothing; it stops there?—It stops there, because the manager will send to the inspector of mines to say that there has been this accident. You never find anything further about it, so far as the general workmen are concerned. Probably a Blue Book may be published, but it is a question whether any of the workmen see it or not. I think only myself in the whole district may get one.

35998. In case a man going round in the morning as a fireman gets burned or injured, or in the case of any injury or accident, what should be done, do you think, if it is not a fatal accident? How would you deal with the matter? —A copy of the report that is sent to the inspector by the manager ought to be given to the workmen or posted up.

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These workmen would see whether that report was an accurate report, as far as their knowledge went, and they would have an opportunity of meeting and discussing it.

35999. You are dealing now with non-fatal accidents, take it?—Yes.

36000. Whether it arises from a man being burned, or an accident, or otherwise, the manager writes to the inspector, but you suggest that the workmen should have some knowledge of the report that is sent?—Yes. The Act appoints the manager to send word, but there is none given to the workmen. I should suggest that there should be some means whereby the workmen could have a knowledge of what was sent.

36001. Would it be reported at all in the report books of the colliery?—It would only be reported in the report book that such a thing had happened.

36002. Would it meet your view if the workmen had access to the report book?—They have access to the report book, but it would be better if a notice could be given to the workmen, because it may not be everyone that would go to the report book.

36003. How would the notice be given to the workmen?—If a copy of the notice that was sent to the inspector was either posted on the pit-top so that the workmen could see it, or given to some official of the workmen, I think that would do.

36004. The notice sent to the inspector you rather suggest would give the particulars of the case and the company's explanation of how it happened?—Yes.

36005. If that was in a report book and seen by the workmen, that would not be sufficient?—I do not think the whole of that can be put in the report book.

36006. It could not?—Well, there would be a considerable amount of it. It would take nearly half of the page, and there does not seem to be that room. It is very curtailed, what is in the report book.

36007. While you get reports of fatal accidents, you think you should equally get reports of non-fatal accidents?—Yes, those of a serious nature.

36008. With regard to the method of timbering, do the colliers themselves timber in your district?—We have two or three systems. In most of them the company have deputies to set the timber, but in their absence the workmen set principally the whole of the timber.

36009. In Durham deputies are appointed whose business it is to set timber?—Yes.

36010. In those cases the colliers are not responsible for setting timber?—They are responsible with the deputy. By the Special Rules we have it is to that effect.

36011. In other cases it is in the man's contract to set his own timber?—We have some pits where the whole is set by them.

36012. That would apply to setting props or sprags or setting timber, or building chocks or packs?—No; the bar timber is generally separate, except that he may have contracted with them at so much a bar, and the chocks are generally separate in longwall. A deputy generally sets them, but the ordinary props and sprags are generally set by the men.

36013. Have you any complaint to make of your present methods of timbering?—Our present method is this: we have always had a voice in making our Special Rules.

36014. We will come to that presently. I am upon your present method of timbering. Have you anything to complain of with regard to that?—I do not know that there has been any complaint particularly. We have complaints with respect sometimes to the method of getting the timber in.

36015. Taking it from the working face?—Yes. Two or three collieries where the men have to take it from the siding or the pass-by, and where long timber is used, say, 5 to 5½ ft., they can only carry it on the tub top, and we have had accidents. There was a case that was tried under the Employers' Liability Act, where the county court judge ruled that it was not a proper method of carrying timber in, and he gave us a verdict upon it. We think that the manager or the employer should be compelled to carry the timber in. The men do not object to carrying in props 2 or 3 feet, in the bottom of the tub, but it is in seams where 5 ft. props have to go that they go on the top of the tub. There is danger of catching the roof and people getting injured.

36016. Do you suggest that your men have a difficulty in getting suitable timber to set?—No, I do not think there has been any difficulty in that. We have no particular complaint about the timber not being in. There is a difficulty where it has to be carried in by the workmen or his trammer or drawer, and carried on the tub top, where it is likely to catch the roof and cause injury.

36017. What do you mean when you speak about the Special Rules? Are you referring to the Timbering Rules?—The supplying of the timber. It should be carried in a tram by the company, and a sufficient quantity laid for the workman at his particular place, within 10 ft. of the face. They should see that he has sufficient. According to the Special Rules they have to see that there is sufficient, and they should see that sufficient was carried by the company where timber will not go inside the tub.

36018. Is it not the business of the company now to see that the timber is brought in?—No, they only see that it is in.

36019. There is an obligation on them to supply suitable timber to a man near his working face, is there not?—Special Rule 116 is this: "Where the coal is put from the face by the hewer, or a putter employed by him, it shall be the duty of such hewer, or his putter, to take the timber from the gate end, pass-bye, siding or other similar place, and to keep at or within 10 yards of his working face a supply of suitable timber, reasonably sufficient for the work that is being done, and where it is the duty of persons, other than the hewer or his putter, to deliver the timber at or within 10 yards of the working face, the hewer shall from time to time inform such persons as to the supply of timber required." In some cases the company put it into this place.

36020. Within 10 yards of the working face?—In most of the cases they do it. The siding or pass-by may be 150, 200 or 300 yards from the face. He has to fetch it, and if it is long timber it has to come on the top of the tub.

36021. How long has that Special Rule been in force?—This is the latest since the systematic propping came in.

36022. Are those Special Rules you raise here those as to the consideration of which your men were not invited?—We have always been invited, but we disagreed upon these, and the inspector was with us, and with regard to any upon which we disagreed it was left to him. These were adopted. There are some probably that we got in where the owners disagreed.

36023. The disagreement was not as to how far the timber should be set, but as to the obligation of bringing this timber within 10 yards of the face?—Yes.

36024. Under that rule the hewer and his drawer have to fetch it 150 yards?—Yes, and some other men more than that, some less.

36025. What have you to say about the haulage roads and the travelling roads?—We have a number of haulage roads, and in fact haulage roads are the rule in our locality. We have very few horses in many of the pits now; where we have big haulage roads nearly every pony is taken out of the pit, it is all rope haulage, and a number of accidents have occurred at the Whitehaven Collieries and at many of the others. We have two or three miles of haulage roads.

36026. What is the nature of the accidents that happen in the haulage roads?—The men get caught with the setts.

36027. The men travelling up and down?—Yes. They have to travel in and out of these roads with the setts running. The setts are fastened to the rope, but there is not any specified distance between the setts, because in the sections and junctions where they are attaching them to the clutch bogey, there may be one sett within 100 yards of another, and then it may be a quarter of a mile. Some would be running on to 30 setts with a very long rope. There is no set rider with the setts, and they are clutched to the bogey coming in and out, and when the sett is travelling a man has to get out of the way, and he may go out of the way of the empties and into the way of the full ones.

36028. In the ordinary way, do the men travel in and out while the machinery is in motion?—In most of them where they have not a special travelling way there are manholes.

36029. Is any effort made to make a travelling road by the side of the main haulage roads?—That is what I want to suggest to this Commission, that a special travelling road ought to be made clear of the engine plane or the haulage road.

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36030. Are these haulage roads mainly in the coal or the metal ?—They are mainly in the coal at Whitehaven, except passing through a drift where it continues, but the same evil exists all the way.

36031. A separate travelling road can be made in the coal ?—Yes.

36032. Some of your working faces are a long way out ?—Yes, at Whitehaven it is five miles to some of the faces.

36033. At those long places they take the men out by trams or bogies ?—Yes, in some cases. They do them principally in the shift now, but a number of men may occasionally travel on the roads.

36034. In those cases where it is four or five miles, it is under the sea ?—Yes.

36035. From the shaft you are in a direct line some three or four miles under the sea ?—It would be that as the crow flies, three miles odd.

36036. There is no provision made for travelling roads ?—They are all high roads. The only thing is they travel occasionally on the haulage roads, and the danger with the bogey is, they cannot carry lights. Lights were tried for a time. They had a red light on each bogey, but they became more a death trap than anything else, because the lights got knocked out and then the men could not see—they were expecting a red light. They were abandoned.

36037. You suggest where men have to walk in and out that there should be separate travelling roads ?—Yes. If that could not be done, the only thing to be done, I think, is for the end of all clutch bogies to be painted with some illuminating paint—the ends of them—which would cause a reflective light and give men more time to get out of the way.

36038. Is your district a fiery district ?—Yes. I think we use lamps in the whole of the district except one or two small shallow pits.

36039. Do you blast the coal mainly ?—In half of the district the coal would be blasted. In other parts, where long-wall is worked. These little seams are not often blasted. There is no blasting allowed in the Whitehaven Pits except in the drifts. There is no blasting in the coal.

36040. Where the blasting is carried on, are the shots fired by qualified firemen ?—Well, we expect so, but whether they are qualified I could not say. I know some shot-firers who are very qualified men.

36041. Have the shot-firers charge of the explosive ?—No, the men generally put in their own explosives and the shot-firer generally attaches a battery. They set the cap prior to the charge being put in.

36042. The shot-firer will be responsible for the position of the shot before he fires it ?—He ought to be, but in some cases he does not know. That is one of the points in which the greatest care should be taken. He should never fire what would be likely to be a fast shot.

36043. There is a danger, unless he sees it charged, that it may be bored beyond the first shot ?—Yes, if bored on the solid and a charge of powder given, it is sure to be a blown-out shot.

36044. And then the inevitable follows ?—Yes.

36045. Do you think the shot-firer should be made responsible for seeing those shots charged ?—I think he ought to be.

36046. And that no shot should be permitted in the solid ?—He should not fire any, in my opinion, unless he had sufficient, 6 ins. or 8 ins. or 1 ft. if a very thick seam, between the distance it is curved in and the hole end.

36047. If he saw it charged he would have a much clearer knowledge as to whether it was likely to do its work ?—Yes.

36048. It may go a greater depth than he has knowledge of, as to whether it is safe or not ?—Yes, and the cap put on as well and just the wire for him to attach in some cases.

36049. What is your complaint with regard to coroners' inquests ?—Do you yourself attend them ?—I have attended, probably, during the period I have been agent, 200 or 250.

36050. Have you yourself had any difficulty in putting questions ?—I have had no difficulty with our coroners. They have been very fair to me in that way, but there is one thing I complain of. When a person gets killed, the coroner, if he can fall in with the inspector, sometimes meets him and gets his approval; according to the Act he holds his inquest right away. A man may be killed to-day, and the inquest finished to-morrow. Nobody knows anything about it, and it does not give the relatives or fellow workmen an opportunity of getting the agent or a solicitor to represent them. In all cases in a mining accident I think the inquest ought to be adjourned, if the body is viewed for burial purposes. I think it ought to be adjourned for a week to give the relatives or fellow workmen time to get some particulars respecting the cause of the accident.

36051. You complain of the want of time. You say that an inquest may take place and you not know anything about it ?—Yes.

36052. Do you get facilities from your Society for viewing the scene of the accident ?—Yes. I cannot say that any of our employers have refused to let us go to view the scene of the accident. We have viewed several localities where an accident has occurred. There has never been any opposition to my knowledge.

36053. Do you think it proper that the relatives should have an opportunity of seeing the scene of the accident ?—If they choose, or some person they choose to appoint. I think, however, it would be better if the coroner's inquest were adjourned. Our late coroner scarcely ever held one without adjourning it.

36054. What have you to say about the examination for certificates ?—I have been a member of the Newcastle Board since 1872, and I daresay that the Newcastle Board is considered to be very stringent in connection with obtaining certificates. Many, to my knowledge, have gone to other Boards. They have tried at Newcastle and have failed, but they have managed to pass in Scotland or Lancashire or somewhere. With regard to second-class certificates I think it would be of great advantage if more marks were given for practical experience.

36055. For practical men ?—Yes. My experience has been this. I know a few who have obtained second-class certificates at the present time, but they have not obtained situations, because I do not think they can earn their living at any kind of work in a mine. They have obtained a second-class certificate through probably book-reading and arithmetic and being fair scholars. I know some who are simply travelling for insurance companies. I know three or four very good practical men who have not obtained these certificates.

36056. Did the men you know obtain them at Newcastle or elsewhere ?—I do not think they obtained them at Newcastle: I do not remember any. We have some very good practical men who have failed to obtain certificates although they are good men—the very best. Certain technical points may be put to them and they may not be sufficient scholars in arithmetic to answer them. But at the same time there are good practical men who would be able to deal with the whole of mining matters.

36057. They would have a thorough knowledge of mining in general ?—Yes, and that is all that is needed in my opinion for an under-manager.

36058. They could not direct the construction of an engine, but you think that they could manage a pit ?—Yes. I think more weight ought to be given by the examiners to men who have a good practical knowledge.

36059. What do you mean by "practical knowledge"—a man who has spent 10 or 20 years in a pit and got coal ?—A man who has done all kinds of work in a pit, hewed coal and set timber and drifted and helped to sink pits—all kinds of practical pit work.

36060. He will have some knowledge of the danger of gases and how to deal with the n ?—If he has been a coal hewer he will have that knowledge of gases because hewers come into contact with most of the gases. He is there daily with them if there are any.

36061. What is your opinion as to inspection generally ? How far do the inspectors in Cumberland inspect your pits: I mean the Government inspectors ?—The chief lives about 100 miles from the centre of our locality.

36062. Coming and going will take him a good deal of his time ?—Yes. There is an assistant, but the assistant in Cumberland is not for coal mines. He is for the metalliferous mines. We do not recognise him as being a party to the coal mines. He is not appointed to the coal mines.

36063. The inspection of coal mines in Cumberland under the present arrangement must be carried out by a man who lives 80 miles away ?—Yes, or his assistant.

36064. How far away does the assistant live ?—One used to live at Carlisle, which is about 30 miles: I

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do not know if he lives there now, but if he does he has to get instructions from the district inspector. I think if the assistant inspector could be called upon to go and visit places without receiving orders, it would be a good thing. Letters have been sent to the assistant inspector but they have had to be forwarded to the district inspector. I think there ought to be more inspection, and it would be better if they were appointed more from practical men who have a thorough knowledge, something like the inspectors the men appoint to go round the mine monthly to make a report.

36065. Still, you would have inspectors who would be qualified and capable of taking certificates?—I do not know that I would go that far. You might get men with any amount of theory but who were not very practical.

36066. If you appoint another class of inspectors it would be necessary for them to be equal in knowledge to the present managers and under-managers at the colliery?—They would be subject to the chief, I mean the sub-inspectors appointed, and any complaint the chief inspector would have to inquire into. He is supposed to stand equal to the managers.

36067. In sending an inspector to inspect a pit you would expect he would have knowledge sufficient to carry him through with a man who manages that pit?—If it was a scientific question he had to inquire into it would be so, but a good deal of inspection is as to whether props are set right, or whether the ventilation is going right, and little falls of stones that ought to be propped up that are not propped up. I think a practical man is as good as the manager or as anybody else to find this out. If there could be an inspector of that description who could give a surprise visit, it would be the means of more care and attention being paid to those things which cause accidents.

36068. If this class of inspectors were practical men, and that is the condition, they would be none the worse for having taken a certificate?—I quite admit that. The practical men would be the best men to deal with the question of propping.

36069. At any rate, you agree that they should be practical men?—Yes, practical miners.

36070. If there were more complete inspection it would lead to less accidents?—Yes, they would be able to make surprise visits.

36071. (*Sir Lindsay Wood.*) You said in your district you had not any complaints to make about the inspection under Rule 38. It is generally carried out without any interference by the owners. Is that so?—Yes. I have no complaints to make of any prevention being put in the way.

36072. Do you think it has any beneficial effect?—Yes, they have made reports as to defects and the defects have been at once remedied as soon as convenient.

36073. The reports have been acted upon?—Yes.

36074. Do you think that inspection might be made by practical men not working in mines at the present time?—Yes, I think it would be better if the workmen were left at liberty to appoint men outside of the works.

36075. Is it not better to have the inspection by someone who knows the mine?—A person goes with them, and it would not be any different whether they worked in that mine or not. They would have a practical knowledge of mining.

36076. You said you thought that the deputies—I understand you have the same system as in Durham—should have smaller districts?—In some collieries we do as much as they do in Durham. The deputy sets the timber.

36077. What size is the district appropriated to each man?—I could hardly say exactly. The areas would be a considerable distance and probably some smaller, but he may have something else to do.

36078. What else does he do?—The man who examines the places does work after.

36079. Do you mean timbering?—Timbering, and he sees the pit started, attends probably to the boys, and acts in a general capacity. In some of the small pits there may be one man for that purpose. He sees to the whole of the work being set going.

36080. That would be in the smaller pits?—Yes.

38081. You do not know how many men one deputy looks after. Is it 15 or 20?—Far more than that. They will vary very much in the pits in the different localities, but in some localities the man who examines the pit in the morning will probably do nothing else all day but examine. He makes a visit to the men again during the shift, which takes up all his time. There is inspection, going round, seeing the work is going on all right.

36082. He can only get over a certain distance, because he has to come to the station before the men can go in?—Two hours is allowed.

36083. You cannot say how many men he has under his charge?—Not particularly at any place. I have known where an accident was that the man would probably have 200.

36084. Were they working in longwall?—We have some working in longwall.

36085. Where this man had 200 men to look after?—He had some long-wall. That man was doing nothing else the whole shift but inspecting the places, although nothing came out of it. This place where a boy was killed had been examined about 3½ hours before the men went in to work, which was contrary to the Mines Regulation Act. That was the reason of the complaint.

36086. That was wrong. He would not be able to inspect 200 places in two hours?—The men work double.

36087. Would that be 100 places?—Yes.

36088. Could he do that in two hours?—No, he would be the whole shift, six or eight hours.

36089. How would that be?—Because he did nothing else but inspection. That was where the thing came up at the accident.

36090. He would have to see the men before they go in. They go in in shifts?—Yes.

36091. He would have to see the men before they go in and examine all the places?—He was violating the rule. The company was violating the rule by appointing him for that purpose.

36092. (*Mr. Ratcliffe Ellis.*) That is an instance of a man not carrying out the rule?—The man was not carrying out the rule, but he was set on for this purpose and could not carry out the rule. He had this quantity of places to inspect.

36093. (*Chairman.*) Which he could not do in two hours?—No, it took him five or six hours.

36094. (*Sir Lindsay Wood.*) You say a man was travelling for insurance who had a second-class certificate?—I know one or two at the present time.

36095. Had he had experience in the mine?—He got a certificate; that is all I know.

36096. In your district is there any particular period of time they must have had experience in a mine before they get a certificate?—If a man wants a second-class or a first-class certificate he applies to whichever Board he likes. He is not obliged to go to the Cumberland Board.

36097. The Act says he must have had experience in a mine?—He would probably have had that.

36098. He would?—I cannot say; that rests with what Board he obtained his certificate from, whether they examined his credentials or not.

36099. He might be perfectly well qualified for a manager's certificate, and yet take up insurance travelling if he had not a situation in a mine?—Yes; it is quite possible.

36100. (*Mr. Smillie.*) With regard to the Examination Boards, is it not possible that a person might fail at Newcastle and have three or four months further education and pass at some other examination?—Yes.

36101. Have you heard of any candidate failing at Edinburgh or Glasgow and passing in Newcastle?—Not to my knowledge. I cannot say that I have.

36102. Would you be astonished to know that there have been many cases of that kind?—No; it is quite possible.

36103. Three months' study may make a big difference. A person may fail to-day, and three months afterwards, at the same Board, he might be able to pass?—Yes, but it would have to be 12 months if he came to the same Board.

36104. You would not object to having a general examination paper set for the whole country on the scientific side of the subject as well as the necessary qualification?—I think a uniform system would be the best.

36105. On the scientific side at least a uniform system to apply to all candidates might be best in order to secure a uniform qualification so far as possible?—Yes.

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36106. There might be then a district examination, if it was thought necessary, to find out whether a person was locally qualified to manage a mine ?—I do not think there is much which comes in locally. We advocated that at the Newcastle Board. Complaints have been made of people going elsewhere.

36107. You have not had any trouble with managers putting obstacles in the way of examiners appointed under Rule 38 carrying out their examination ?—Not any special charges, but I say this: that a manager has a hundred different ways of prosecuting a man for this purpose without exposing him. It may be something indirect he prosecutes him for, or dismisses him, while the examination might be the real cause. It is hard to get at it. We have had men removed and we have thought it was for that, but we could not trace it to any charge or some action might have been taken.

36108. Have you heard a manager protesting against the nature of the examiner's report in the report book, and expressing an anxiety that the report should not be put in as they put it in ?—I believe there has been something of that kind in some of our places. I believe a case did arise of that description once, but we persisted on the report being put in.

36109. You are well acquainted with General Rule 38, which gives power to the workmen ?—Yes.

36110. I do not know whether you have answered Mr. Edwards with regard to this matter. You are in favour of appointing persons who are or who have been practical working miners ?—I think that would be the best thing that could be done.

36111. The last clause of Rule 38 says that "the report shall be recorded in a book to be kept at the mine for the purpose, and shall be signed by the persons who made the inspection; and if the report state the existence or apprehended existence of any danger, the owner, agent or manager shall forthwith cause a true copy of the report to be sent to the inspector of the district." You are aware of that clause ?—Yes.

36112. The presence of firedamp would be a danger or an apprehended cause of danger ?—Yes.

36113. The presence of coal dust in large quantities might also be looked upon by the inspector as a cause of danger ?—I think it ought to.

36114. In the case of examiners reporting in the report-book the existence of quantities of gas in places not fenced off, and dangerous quantities of coal dust, do you think that report should be sent to a mines inspector ?—Yes, I think anything that is likely to lead to an accident ought to be sent to the mines inspector unless it is remedied at once.

36115. If the inspectors in their report call attention to danger or apprehend danger, would it not be carrying out this clause if that was sent on to the mines inspector ?—Yes. I do not see why the full report cannot be sent to the inspector.

36116. There are certain conditions under which it must be sent on. If there is any danger or apprehended danger reported, the clause says it must be sent on. Are reports of that kind sent on as a matter of fact to the mines inspector ?—I cannot say. We expect that they are sent on, but that is a matter that rests between the management and the inspector. That is one of the matters where an inspector ought to give more publicity to the workmen with regard to the report he gets.

36117. Are you aware in the case of the Whitehaven Collieries that you have mentioned that the examiners who examined a few weeks ago did put into the report a complaint as to the accumulation of fire-damp being given off, and the presence of gas in dangerous quantities. Are you aware that that report was put into the report book ?—Yes.

36118. Are you aware that it was not sent to the mines inspector ?—It was given out in evidence that it had not been sent.

36119. Do you consider that in keeping with this clause of the Coal Mines Regulation Act ?—No; the manager ought to have carried that out. It would be better if there were some means or a proof that such was done to the men from the inspector.

36120. When inspectors are appointed by the workmen to report the presence of danger in the report book, do you naturally expect that will be sent on to the inspector, and followed by a visit from the inspector to see whether or not the thing is put right ?—One would expect that would be done, but whether the inspector comes or not I could not say.

36121. Is that not the purpose of sending it to the inspector in order that he may pay a visit to find out whether the danger has been attended to or not ?—That seems to me to be the spirit and meaning of the Act, that the inspector ought to visit the place directly after he gets the report.

36122. I am not sure whether the assistant-inspector at present lives in Newcastle or Carlisle. I understand Mr. J. B. Atkinson is your chief ?—He is the chief.

36123. Is the assistant Mr. Abbott ?—Yes; Mr. Nicholson was.

36124. Mr. Abbott lives in Newcastle ?—Mr. Nicholson did live at Carlisle. Mr. Oswald died at Carlisle. He lived there.

36125. The mines inspector at Cleator Moor is not the inspector under the Coal Mines Regulation Act, but under the Metalliferous Act ?—Yes.

36126. You do not call attention to any complaints in connection with the coal pits ?—No; it is for the metalliferous mines inquiries.

36127. Under your Special Rules there are arrangements made for lamp stations at certain places defined by the manager; lamp stations beyond which the workmen ought not to pass until examination is made ?—Yes.

36128. Those rules apply to the Whitehaven Collieries ?—To the whole of the collieries. Our rules apply to the whole of the county. We have them now all alike.

36129. Is it the fact that the workmen in the Whitehaven Collieries have been accustomed to remain at the lamp station until the examination was made ?—I expected so until evidence was given at the late enquiry that they did not do so.

36130. You found out then it was not customary to do that in all cases ?—No. From the evidence given it was proved that they travelled beyond, and nothing was said to them.

36131. That was a breach of the rules ?—Yes, that is a breach.

36132. If the rule was carried out it would be all right. The rule provides that they are not to go beyond a certain distance ?—Until the fireman returns to report the position from his examination.

36133. Are you favourable to deputies or firemen holding a certificate of competency by examination ?—Yes, I think it would be a step in the right direction, because many deputies are put on, it may be, from favouritism. They may be brothers-in-law or relatives of some manager, and have very little practical knowledge of mining. I think they all ought to have a qualification. They ought to have something set which is not as severe a test as that of the under-manager or manager, but there ought to be some qualification as to practical mining, with respect to propping, setting and securing roofs, and gas, and those things, in connection with the working of a mine.

36134. An examination as to these things, and the granting of a certificate, would let the manager know that they had that knowledge ?—Yes. It would be well if there were local boards for that purpose of qualified parties appointed in localities. I do not mean it would be wise to carry them to big centres, because it would be costly; but local boards in the case of a county like ours, which covers 24 miles. I think there should be a centre where the men could be examined by parties appointed in the district, as to that knowledge which was local.

36135. You would be satisfied with any method which would secure that ?—To prove that the deputy or shot-firer had abilities for the occupation he was put in.

36136. You have been down the William pit ?—Yes.

36137. You have been between three or four miles under the sea in that pit ?—Yes.

36138. Do you know it is a very dry and dusty mine ?—Yes.

36139. Do you know in some cases that there are three or four inches of very fine dust lying at the bottom and on the timbers ? There is a considerable quantity on the timbers ?—Yes, and on the haulage roads. It is the dust from the tubs, which settles in large quantities.

36140. Are precautions taken to water the dust and to keep it damp ?—They have occasionally done so, but I do not think that the watering has been continuous, as it ought to be. Occasionally they may have watered it, but I do not think that watering has been applied continuously.

36141. Is there anything done in that pit to prevent shots being bored in the solid in drifts, and fired in the solid ?—I think there should be something done to prevent them.

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Mr. A. Sharp.

22 Jan., 1908.

36142. Has anything been done, so far as you know, to prevent it?—No.

36143. Is it the custom in drifts to bore the holes in the solid and fire them?—I think the evil commences in that You are referring to the last explosion.

36144. Yes?—The Company lets a drift by contract, and then they give the man the explosives free. Then he drives the drift with cheap labour, and does not drive it as a practical drift ought to be driven. Here he has a freedom of explosives, and he burns it out. The recent explosion might have had most serious consequences. There were no less than seven holes. That is a plan (*producing plan*). There are the seven holes drilled in a little seam of coal. It was running in the drift 7 inches thick, and there were two holes ready at the top. These holes could not be a foot apart in a 9 ft. drift. They were bored in the coal, and there was the dust taken out of the holes—it was a dry drift—and the two flanking holes were fired, and then the third, and then the fourth hole, which was fired, was a blown-out shot and caused explosion.

36145. Were they holes bored in the solid?—Five feet at least in the solid.

36146. Saxonite was the explosive used?—Yes. I was shocked when I heard the evidence and saw the plan, as a practical drifter. It surprised me.

36147. There was not a large quantity of dust in the drift itself?—No.

36148. The explosion was a gas explosion, so far as the evidence went?—Yes. The fan, no doubt, was stopped, and would have to be stopped. They had to ventilate it with a fan. Within the last 50 yards the fan was stopped by the shot-firer. He fires two shots at first; the fan would have to stand, because the fan-man could not work. There is a sort of refuge against the explosive from the shot, which he gets behind. He fires a shot, and the fan would stand again. The fan would stand when the fourth shot was fired. These, no doubt, accumulated gas, and the vibration of the shot would drive the gas further out from the air, being lighter, and it would mix gases together. This blown-out shot, the explosive having nothing to resist, blew out 200 or 300 yards—the flame—and the explosion occurred.

36149. Two of the men who were killed were 300 yards from the place where the explosion took place?—Yes, between 300 and 400 yards out.

36150. The flame of the explosion must have gone down within 100 yards of the main roads, because one of the heavy sleepers was burning there?—Where the men were found they were singed.

36151. Was there evidence of the mines inspector that, had that explosion continued another 100 yards out on the main road, it would have caught up the dust and probably everybody in the pit would have been killed?—Yes.

36152. Does not that lead one to suggest that something should be done to prevent this accumulation of dust, or that it should be damped in the mine?—Yes. If shot-firing is to be done, the dust ought to be damped. There ought to be great care taken with respect to allowing the firing of these shots in the solid. They ought not to be allowed to be fired in the solid in the coal.

36153. Your county has been particularly unfortunate last year with regard to accidents?—Yes.

36154. You are considerably beyond the proportion of fatal accidents for any other period?—Yes, we have had a lot of shaft accidents, too.

36155. (*Mr. Ratcliffe Ellis.*) The areas are too large for the deputy to examine satisfactorily. Can you suggest any words by which a rule could be framed prescribing the size of areas?—Yes. I think the areas ought to be taken into consideration when appointing the two hours' examination. I think that might be if there was a meeting between the workmen and the manager. I think they could arrive at what was a reasonable area for a deputy to examine in the morning.

36156. Can you suggest what an area should be that could be put into a rule without a meeting? Do you think it could be said that a man could travel within the period of two hours from the time he has to make the examination before commencing work?—I should have to know the examined seams, because the seams vary. We have some from 20 inches.

36157. The conditions are so dis-similar that no general rule could be made to apply?—No, only a rule might be made that the workmen or some inspector ought to specify the area. There ought to be an area specified.

36158. The manager is responsible for the mine. I want to see if you can suggest any general rule which would be applicable. I think you will agree with me that it is impossible, because the conditions are so dis-similar. Do we agree as far as that?—Yes, but a rule might be suggested. I do not mean that you could suggest a specified distance the same as a specified number of hours—you get two hours specified—you could not specify two miles, because in some places it could not be inspected.

36159. Does it not all come to this: These dis-similar conditions make it impossible to suggest a general rule?—Yes, only they might be agreed upon.

36160. The areas which these districts must be, must be dependent upon somebody, somebody must prescribe them?—Yes.

36161. The manager is responsible for the safety of the mine?—Yes.

36162. Is he not the person to prescribe these areas?—Yes, but suppose he places more on to a man than can be done.

36163. The inspector is the person to interfere?—I am coming to that.

36164, He is now?—What is the good of the inspector and the manager after the accident has happened?

36165. To prevent another accident?—No, it still leaves the manager with the same power. That is one of the matters for discipline.

36166. Do you suggest the manager should consult with the men as to what areas these deputies should have charge of?—What would be reasonable areas?

36167. Supposing they did not agree?—Then the inspector could be asked.

36168. Who is to be responsible? The manager is responsible now. Supposing the manager is over-ruled by the men, would you make the men responsible for an accident and relieve the manager from responsibility?—It would not make them responsible.

36169. You would take away the authority of the manager and leave him responsible for the consequences?—That would not take it away from him. The deputy appointed would be responsible for his actions.

36170. With regard to the distance prescribed, the manager is not to have the management of his pit, but there is to be a debating society, consisting of him and his workmen. If that is so, is it fair to leave him responsible for any mischief which happens from that management?—If a manager prescribes an area for the man and that is too large and the man cannot do it, the manager is not responsible.

36171. Yes, he is?—It is the man who failed to do his duty.

36172. The manager is distinctly responsible?—In Section 50 he is responsible for the act.

36173. The owner, agent and manager?—That is one of the clauses that wants most reforming of anything. That is the question of prosecution.

36174. We will go on to another point. Whenever there is a report made by the manager to the inspector in case of a non-fatal accident arising from an explosion or any of the causes which oblige a report to be made in connection with a non-fatal accident, a copy of that report must be made to the men?—Yes.

36175. Why?—So that they shall have them.

36176. To see whether the manager is telling the truth or not in the report he makes to the inspector?—So that the men shall be informed of how the accident occurred.

36177 Do you doubt that the manager's report is a true one?—But the man has not a knowledge.

36178. Why cannot they ask the inspector for it?—How do they know if the inspector has received it?

36179. They know when there is an accident?—They do not know when the report has been sent.

36180. They can find out?—How?

36181. Do you desire that an inspector should be required to give the report to you?—If the men received a knowledge of what had been the cause of that accident—

36182. Why do they want to know it if the inspector has the information? Why give notice to the men?—Why should the men be kept in ignorance of it?

36183. Why should the employers give notice to the men? He gives notice to the inspector?—Because it would then give the men some knowledge of what was taking place.

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36184. I understood you did not think much of certificates. You preferred practical experience ?—No, I did not say that.

36185. Some of the men, I understood, who were to be eligible for the appointment of inspectors, you thought might not be able to pass an examination ?—I say that the Examiners' Board ought to give more marks to practical miners.

36186. I am talking about the certificates given to deputies and men of that sort. Do you think there should be a rule that no person should be appointed a deputy who has not a certificate of some kind, do you agree if the manager did not prefer his cousin or relatives but honestly wished to select the best men, that he should not be allowed to select a man who has not a certificate ?—If a rule was provided that there was to be an examination for deputies and firemen to know whether they had the qualifications for the job, it would be a good thing.

36187. As a practical man do you think you would exclude a great many very excellent men if you required them to pass a written examination ?—No, I do not think we would, because the examination might be of matters that they were going to follow. I do not mean to give them a scientific examination with regard to something they do not understand.

36188. This is to prevent the mine manager appointing by favouritism ?—It would prevent the mine manager from appointing men who were not capable of their occupations.

36189. It would prevent him appointing a cousin if he was a capable man ?—Not at all.

36190. With reference to this Timbering Rule 116, I understand you had a meeting when these rules were framed ?—Yes.

36191. You objected to Rule 116 ?—Yes: we wanted the whole of the timber carried in.

36192. Does this Rule 116 represent what has been the practice in your district for many years ?—No: it only represents what has been the practice at a part of our district.

36193. In that particular part of your district this has always been the practice ?—Yes.

36194. The men's wages have been fixed upon the assumption that this is work they have to do in addition to getting coal ?—I do not know that there would be any particular fixing on that, because when the wages were fixed at the ton price they would probably be near the shaft, so that there would not be far to carry them.

36195. This is work which had to be done in your district by the collier, and he does not get any special payment for it: it is included in his tonnage rate ?—Yes. *Mr. A. Sharp.* 22 Jan., 1908.

36196. You wanted to remove the obligation from the collier or hewer and put it on to someone else ?—No. I want to take away any system that is likely to tend to accidents, and if timber is being fetched in that manner it is likely to lead to accidents, and did lead to some men being injured through carrying it, and at the same time probably some men might be injured through not having it in.

36197. There are two sorts of injuries, one in carrying it in. Whether carried in by the collier or somebody he pays, or by the employer or somebody he pays, there is an equal liability to accidents ?—No.

36198. Why is he more liable to accidents if it is somebody paid by the employer rather than by the collier ?—Because the employer, when he carries it in, carries it in in a proper timber bogey, and there is not likely to be much accident from that: but when the workman carries it in it is on the top of the tub. If another bogey was coming out and hit it, and the prop projected over lying like that on the top of the glass (*the Witness indicated with a tumbler*), and the man behind it *here*, he may be injured. When it is carried in by the company it is carried in in a bogey of this description, so that there is no danger (*the Witness indicated*). The short props we do not object to, of 2 or 3 ft., which will go inside the tub. A man can carry them, but when it is those which project over, we object to them.

36199. That was your objection to this rule ?—Yes.

36200. The inspector, I understand, decided it was to be in this form ?—It is in the rules. I suppose he gave permission.

36201. You first say that to carry timber of any length on the top of an ordinary tub is dangerous ?—Yes.

36202. That is a matter for consideration, of course ?—Yes, it is.

36203. If you had had your way this rule would not have been in these regulations ?—No, not in the form it is.

36204–5. If you had a veto, that rule would not have been there, although it is a rule which the inspector approves of as necessary for safety ?—The inspector has evidently tried to oblige both sides and put in both at the same time.

FIFTIETH DAY.

Thursday, 23rd January, 1908.

PRESENT:

Lord MONKSWELL (*Chairman*).

Sir LINDSAY WOOD, Bart.
H. H. S. CUNYNGHAME, Esq., C.B.
WM. ABRAHAM, Esq., M.P. (Rhondda).
ENOCH EDWARDS, Esq., M.P.
THOMAS RATCLIFFE ELLIS, Esq.
JOHN SCOTT HALDANE, Esq., F.R.S.
ROBERT SMILLIE, Esq.
S. W. HARRIS, Esq. (*Secretary*).

Mr. WILLIAM WHITEFIELD, called and examined.

36206. (*Chairman.*) Do you appear on behalf of the Bristol Miners' Association ?—I do.

36207. What is your claim to represent the Bristol Miners' Association ?—I am their Agent and Corresponding Secretary.

36208. Have you been so for any length of time ?—18 years.

36209. Have they deputed you to give evidence before us ?—Yes.

36210. Have you had any special instructions from your Association as to the views you are to represent, or do you simply give us your views gathered from an experience of 18 years ?—The views I have gathered from an experience of 18 years. *Mr. W. Whitefield.* 23 Jan., 1908.

36211. With regard to Government inspection, you say that more visits would be desirable, but in other respects you have no fault to find with the actions of the inspectors ?—That is so.

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Mr. W. Whitefield.

28 Jan., 1908.

36212. That is to say, they do as much as they can do, but you do not think there is half enough ?—That is my opinion in the Bristol coal-field.

36213. What is your notion of Government inspection ? How often do you think it would be desirable that the mines should be inspected by a Government inspector ?—It would depend upon the condition of a pit, but I think a mine ought to be examined at least once a month.

36214. All through, or by sample ?—All through—of course, I mean by the Government inspector.

36215. The Government inspector or assistant inspector or some other person appointed by the Government, you would say ?—Yes.

36216. Would you make the districts smaller, or would you meet the difficulty by appointing, say, a third-class of inspector, who should be taken from the working-men class, and have a smaller salary than the present inspectors and assistant inspectors ?—I think it would be in the interest of safety that a large number of working-men inspectors should be appointed under the supervision and guidance of the Government inspectors.

36217. Do you consider there are enough Government inspectors of the class that are at present employed, or would you increase that number ?—I think not.

36218. You would simply have a third class to assist ? —Yes.

36219. That class would be a very numerous class. If a Government inspector of some kind is to go through the whole of every mine once a month, you would have to have a very great many of them ?—Yes.

36220. Perhaps a dozen in each district, or more ?—Do you mean each coal-field ?

36221. No ; I mean there are 12 districts now under district inspectors, and, I suppose, in those districts you would want at least a dozen sub-inspectors ?—I do not know exactly how many it would take, but I should at any rate have sufficient that the pits should be examined by a Government inspector once a month.

36222. All through ?—Yes.

36223. On the question of the inspection by men under General Rule 38, you think that the local inspectors appointed by the workmen of a colliery are dependent on the owner of the colliery for their employment, and that may deter such local examiners from pointing out and giving a report as they otherwise would do were they not so dependent for their future employment on the owner ? —Yes.

36224. Do you think if a number of practical miners were appointed in each district, who would be under the authority of the chief inspector of the district, and paid as Government inspectors, that would be an improvement ?—I do.

36225. I understand you would still leave the workmen of each colliery with the right, as now, to select not merely one of their number at the colliery to examine the mine, but a man who is or has been a miner, and that apart from where he worked or where he lived in the county ?—Yes.

36226. You would alter the Act of Parliament so that a person who has been a miner should be eligible, and you would place no restriction upon the men choosing whom they liked, quite irrespective of the mine at which he worked ?—Yes.

36227. That is the case now ; I do not think there is any restriction : they may appoint anyone they like, whether he belongs to their own pit or not ?—If that is so, I was not conscious of it. I thought the man must be employed under that company.

36228. The men may think it desirable to have a man appointed who was working in their own pit ; and in 99 cases out of 100 they would appoint a man from their own pit, but I believe it is a mistake to assume they have no right to appoint an outsider so long as he is a practical working miner ?—I was not conscious of it.

36229. You say that such examiners in the case of fatal accidents should have the right to appear and give evidence before a coroner, or in and Court where the case might be heard ?—Yes.

36230. If a workman who is employed in these examinations knew anything at all about the circumstances attending an accident, would he not naturally be the person to appear before a coroner's Court, and would anyone object to his appearing before the coroner's Court ?—I am not conscious that any objection has been raised, but I think if he were bound to be there by law, there would be a greater certainty of proper evidence being got.

36231. If he had some means of knowing the cause of the accident, you would compel him to be present and give evidence ?—Yes—if he was conscious of what transpired at the place where the accident occurred.

36232. (*Mr. Ratcliffe Ellis.*) I understand you say he should have a right, but is he to go at his own expense ?—If he was a Government inspector he would be paid by the Government.

36233. (*Chairman.*) This is not applicable to a Government inspector ?—This is the inspector appointed by the workmen. In every case where the workmen have appointed the man, I should expect the workmen to pay him.

36334. That he should be obliged to appear and that the workmen should pay him ?—That is over and above the Government inspector appointed by the Government ; but the workmen should still have a set-off at their own expense if they thought it well to examine the pit, and also to appear and give evidence before the coroner.

36335. Are you confident you represent the opinions of the men on that matter ?—I feel confident I do.

36336. You say in your statement to us that these inspectors appointed by the men should have the right to appear, and you say you think they should be compelled to appear and the men should be compelled to pay them if they do appear ?—Yes, that is what I mean.

36337. As to inspections by officials under General Rule 4 you say to ensure that examiners are efficient they should be examined by the mines inspector of the district before they are appointed as to their knowledge of explosive gas in mines, ventilation, first-aid, ambulance, and how they would act on finding gas in their district ?—Yes.

36338. Would you consider it sufficient if an examiner had a first or second-class certificate ?—Yes.

36339. That would satisfy you ?—I think also it would be wise if in future he should have knowledge of first-aid ambulance.

36340. So that if a man could show he had a knowledge of first-aid ambulance, and that he had also passed a first or second-class certificate examination, you would exempt him from any further examination ?—So far as I at present know, I would.

36341. Would you put it in the power of the mines inspector if he was satisfied from personal knowledge that a man would make a good examiner, to appoint him an examiner notwithstanding that he had not got a first or second-class certificate ?—Well, I do not know.

36342. At all events if he had a first or second-class certificate, and had passed in first-aid ambulance work, you think that would be sufficient to qualify him ?—Yes.

36343. You think the mines inspector should fix the size of the district each examiner is responsible for ?—I do.

36344. Have you much to complain of as to the size of the district ?—I do not want to individually complain, but I think generally the districts are too large, according to my experience.

36345. You will not say all districts are too large ?—I do not say so.

36346. But in many cases the districts are so large that the examiner cannot perform fully the duties assigned to him ?—That is my finding in my mining life. I think in many cases that is so.

36347. You say, as a reason for the Government appointing so many inspectors and there being so much Government inspection, that the inspectors appointed by the men are very much under the power of the managers, and are dependent upon the managers for their future to a great extent and you are afraid that in some cases they do not care to give quite an exact report as to what they have seen if anything goes wrong ?—I do not make complaint of any particular case, but I think the natural trend of things is bound to be that way.

36348. Do you say you have known many cases where the men have had reason to believe that a man has suffered in consequence of giving a true and unfavourable report ? —I hold it as a general opinion that the man feeling his bread and butter is dependent upon the employer whose pit he is examining, it tends in the nature of things to prevent his giving such a report as he otherwise would do.

36349. Could you point out to the Commission, without mentioning names if you like, any instances ?—There is no specific case I can give ; I only give it as the general impression that has been made upon me.

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36350. With regard to discipline and its enforcement by fining or prosecution, you think the practice of fining is bad?—I decidedly object, from my experience, to a magistrate's office being fixed on the pit bank. It is one of the most pernicious things I know of. In some cases the manager takes to the fining of men, and of course there are managers and managers—but I have a strong objection to a deduction from mens' wages at the caprice of any manager.

36351. Do you think there should be only three ways of dealing with it; either warning him not to do it again, or dismissing him, or sending him before a magistrate?—I do. Take him before the law, dismiss him, or warn him.

36352. In no case would you have fines imposed even by agreement between the manager and the men?—I would not.

36353. You are pretty sure you represent the miners in that opinion?—I am sure I represent the miners in that opinion.

36354. With regard to accidents from falls of roof and side, and haulage accidents, you are strongly of opinion that the primary object for the getting of coal to the pit bank being individual profit, it results in pressure being brought to bear both on the workman and the official, and is adverse to the best forms of safety to the workmen; and, as a means of counteracting that and reducing such accidents to a minimum, you strongly favour the nationalisation of mines, and you think that would exclude the element of private gain and be an important factor for good?—Yes.

36355. How would the nationalisation of mines affect that?—If the pressure on the men was less than it is now, I believe many accidents would be averted. If that measure of pressure that comes naturally without any ill-intention on the part of the owner, and comes from the effort to obtain private gain, were eliminated to that extent, I believe that the accidents would be reduced.

36356. Is not the principal reason why a man wishes, perhaps, to work under conditions that may possibly cause an accident generally due to the fact that the men are paid by the piece and, consequently, that they want to make as much money as possible?—In the coalfield I come from I do not suppose more than one-half are paid by the piece. We have a large number of day men, and even men on coal—a large number, many hundreds of them—are not able to earn more than what we call their day wage. But there is always a pressure put upon the men to get beyond that—that is to say, if a man cannot make from 3s. 1d. to 3s. 4d.—it varies from 2s. 10d. in our coalfield to 3s. 4d. for eight hours—we look to the employer to pay that plus the percentage; but the natural tendency is for the officials to urge the men to get that and more if they can, and it is in that pressure in some degree (I do not say absolutely) accidents may arise therefrom.

36357. The principal pressure taking place in the case of those men who are paid day wages?—It would be principally with men who are on coal.

36358. They are paid by the piece, are they not?—A tonnage price is fixed by the employer, but if a man cannot earn whatever the rate of wages may be in that particular colliery—say, 3s. 1d. for eight hours plus the percentage, or 3s. 4d.—we ask the employer to make it up to that; but there is the pressure on the part of the official and the employer to seek to urge the men to get that and more, and it is in that urging that I think accidents occasionally arise. I do not complain of it, it is natural.

36359. At all events your opinion is that under the present system of payment the owners very naturally, without any evil intentions, are inclined to hustle the men into working rather faster and harder than is consistent with their safety or than they would work if they were not so hustled?—I think so.

36360. As to safety lamps, you say you have always been well satisfied that your mines inspector and those in other districts with whom you have had to deal, give this matter full and due consideration?—Yes.

36361. You have nothing more to say about safety lamps?—Not so far as what I have seen of Government inspectors; they keep a fairly keen eye where they think the use of lamps of any kind is required, and they see they go in—at least, they give that recommendation.

36362. As to investigation into mine accidents, you say that where the workman was not a member of a trade union, then such person as the relatives of the deceased might appoint should by right appear before a coroner and examine witnesses. In your district you have no complaint at all as to the coroner objecting to any witnesses brought forward by the men?—That is so in my own district. I have no complaint to make in relation to the coroner and to the order in which the business is being conducted, but I speak from experience of other parts.

36363. Previous to your coming to this district you have known cases where the relatives of a deceased person have applied to give evidence before the coroner and the coroner has not allowed them to give evidence?—I have not said that; but speaking from what I have heard from leaders of the Miners' Federation of Great Britain, I know complaints are made from various districts that the coroner's court is not carried on in a way that is to them satisfactory.

36364. At all events that is not your experience personally?—No, not in the Bristol coalfield.

36365. As to ankylostomiasis, you would urge the need of increased ventilation, because the general opinion of the medical authorities is that a mine of high temperature is conducive to its propagation?—That is so.

36366. You do consider that there is some danger of ankylostomiasis in your mines?—I do think so in the Bristol coalfield. Such is the temperature of some of the mines that I think they would lend themselves to it.

36367. Do you think the men would be willing to submit to the use of conveniences underground so as to prevent the spread of infection if any danger should appear?—If the owners provided them I presume the men would be compelled to use them.

36368. And you think they would use them?—I do think so.

36369. As to the provision of baths, you say you would urge, as in Germany and Belgium, the great need of baths at each of your pits, and that the miners should, on leaving the mine, don their own clothing and leave at the colliery to be dried their pit clothing. Might that not depend to a great extent on how far their homes were from their work, and might not a man very often prefer to go home, say, a quarter of a mile and have a bath there and change his clothes there, than change with all the other miners at the pit-head?—I was not looking at it from what the men would prefer, but what is best. It seems to me a standard of sanitation is highly important, and they should wash on coming out of the pit. I also think one of the greatest detriments to the miner is his black face. I think if you could get rid of his black face he would appear much better in the eyes of the public.

36370. If his home was close by, very few people would see him with his black face?—Yes, but in some cases they live four or five miles off.

36371. Then would you change your opinion and say where he has to travel by train or go several miles to get home, that conveniences for washing should be afforded which he should be compelled to make use of?—No. I should like to see it made compulsory that there should be a washing place at the pit's mouth, and he should wash.

36372. And that they should change their clothes there?—Yes.

36373. Do you wish to say anything else?—I should like to say, in my judgment, the reductionof the hours of labour would be conducive to a decrease of accidents in some degree. The district from which I come is a long-hour districts, as we say, with the exception of one colliery. We have one colliery where the men work eight hours from bank to bank except a few at the bottom of the pit, and the other collieries work 10 hours a day.

36374. With regard to accidents, how do they compare in a mine where they only work eight hours, with a mine where they work 10 and 12 hours a day?—I have not the means of putting my finger upon a specific case.

36375. We should very much like to know that; it would be a very useful statistic to have if you could prove that in the mines where there were eight hours a day worked the accidents were considerably fewer than in mines where they work 10 hours a day. That would be a circumstance we should like certainly to take into consideration?—I can only reason from my own knowledge of the matter, having been a miner myself, and a deputy in Northumberland, for a number of years. I know when I was in a pit for such a number of hours the impression it made upon myself. I know my own feelings, the dulness of my senses, which I presume would be the same with others.

36376. (*Sir Lindsay Wood.*) You advocate working-miners as inspectors?—I do.

36377. Under Government control I suppose?—Yes.

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36378. You consider they should pass an examination?—I do.

36379. And hold a first or second-class certificate?—Yes.

36380. They should either have one or the other?—Either one or the other: that is overmen examiners.

36381. You suggest there should be a certain number of working-men inspectors to examine the mine every month?—Yes, under the supervision of the Government inspectors, I mean.

36382. Perfectly independent of the colliery owner, and to be paid by the Government?—Yes, independent of the colliery owner, and to be paid by the Government.

36383. And they should pass an examination?—Yes.

36384. Equal to a first or second-class certificate?—Yes.

36385. You say that under General Rule 4 the men who examine the mine should also hold a certificate?—Do you refer to those appointed by the workmen?

36386. No, those who examine the mine every day before the workmen go in?—I do.

36387. From what class of man are those men appointed in your district now?—From the workmen in the mine.

36388. Before they should be appointed examiner in your district you think they ought to pass an examination?—Yes.

36389. Equal to a second-class certificate?—Well, to such as might be laid down, at least I think a second-class certificate.

36390. Would the men be prepared to do that?—The Bristol miners?

36391. Yes.—I know nothing to the contrary.

36392. Before you appointed him examiner you think he should be made to pass this examination?—I think so.

36393. (*Chairman.*) Have you many miners in your district who have first or second-class certificates?—I am not aware how many—I am afraid too few.

36394. (*Sir Lindsay Wood.*) You advocate there should be no agreement to fine a man, however trivial the offence?—Not by the employers. I think it is pernicious, and in my judgment the tendency is to carry it too far.

36395. Every case should be taken before the magistrate?—Well that is for the employer to decide.

36396. I mean if it is an offence, or he breaks a rule of the conditions of hiring, he must go before a magistrate?—I prefer that to setting up a magistrate's office on the pit bank.

36397. That would cost very much more than an ordinary fine, even if the man agreed to it?—I do not mind that. I would rather we spend our money to defend our men before an impartial tribunal than pay it by way of fine.

36398. Even if he pleads guilty?—Yes.

36399. You would still take him before the magistrate?—If a mutual understanding can be come to, when the man was wrong, between the employer and the man, that would be a matter for consideration, but I would not like to give the employer a free hand where he thinks right.

36400. The employer can only fine with the consent of the man he is going to fine?—The consent of the man may be given because he dare not do any other—he does not want to lose his employment.

36401. He would not lose his employment if he did not agree?—The man is not a free agent in the matter: he depends for his bread and butter upon the man who is going to fine him. I think he should be tried by an impartial tribunal.

36402. Would it be better to take him before the magistrate with the heavy cost involved?—You assume in every case where an employer says "I shall fine you" he has a right to fine the man. I believe he has no such right in a large number of cases.

36403. If the man objects he cannot fine: but he has the alternative of saying "You must leave my employment or go before the magistrate?"—Yes, in case the act was a justifiable one for his doing it.

36404. In no case would you allow any compromise other than prosecution? It is a very large order you know?—Well, I prefer the one to the other. I prefer to go before the magistrate's court whatever the result may be, so pernicious do I consider the pit bank fining.

36405. You think accidents are often due to pressure being put upon the men to work more than their ordinary day's work?—I think in some degree that does apply, and I should think in a large degree.

36406. Is there any limit forced upon the men not working more than their ordinary day's work?—The trend of events in the coalfield from which I come is that a man is asked to stay in and do a little blowing here, or a little cleaning up there, with the result it leads to his stopping in the pit occasionally beyond 10 hours.

36407. You say he gets about 3s. 1d. a day and the percentage?—Yes, up to 3s. 4d.—one colliery pays 3s. 4d. and the percentage. That is the minimum wage that the miner gets. He may get more if his place is good, and he can get more coal, and then he may get 5s. or 6s. or 7s. a day. When I speak of 2s. 10d. up to 3s. 4d. I am speaking of the minimum that we would claim for him, but he may get more.

36408. I thought it was the maximum?—No, that is the minimum.

36409. A man may get up to 5s.?—Yes, or 6s. or 7s.

36410. Would that not really answer what the Chairman put to you, that these men were working and trying to get as much coal as they could do, and rather risking danger than stop working?—Well, in so far as that applies, if the men could get a fairly good wage without the extra pressure, even for themselves it would tend to reduce the accidents. But there is a natural pressure by the employers and officials, I have not the slightest doubt, which results in some cases in accidents—how much I cannot tell—and if that pressure were removed I think the accidents would be less.

36411. It would depend upon the degree of danger?—Yes.

36412. It would be equally dangerous if a man sat in the mine and did nothing for an extra number of hours?—It would depend upon where he was sitting.

36413. It is probably more dangerous sitting doing nothing in some places than doing something?—It is not, according to my experience—I would chance the sitting.

36414. You think the reduction of hours of labour to 8 hours would reduce the number of accidents?—Yes.

36415. You seem to have very excessive hours in your district?—In some collieries—it is not universal. We have some collieries where the men stay in a good deal, but at other collieries they do not.

36416. You said 10 to 15 hours, I understood?—Yes, in some cases—that is where the men stop at night to put the place right for the next day. If we had a universal Eight Hours Day that would all end—and I am living in hopes of that.

36417. Do you think there would be any more pressure put upon the men with an Eight Hours Day to get the quantity out than there is now with the present hours worked in the Bristol coalfield?—I think the pressure of which I spoke will remain as long as private gain is the object which the employer has in view. But in consequence of the man not remaining in the pit that time his senses will be keener and there will be less liability to accident.

36418. Do you assume that there will be as much coal obtained with the eight hours as there is with the long hours?—I am not so sure of that. I have a most decided opinion that the eight hours will not make such a depreciation in the output as is assumed.

36419. You think there will be no more men required?—I hope there will be, but not to the extent that is assumed.

36420. I do not quite know what has been assumed?—That the reduction of output will be in proportion to the reduction of hours. I do not think so, and my experience is to the contrary. As a Northumbrian I knew the days of long hours there, and I know the days of the short hours, and the production of the northern men has not been reduced in proportion to the reduction of hours. I think you will find that the Durham miners now are producing more coal per man than they were in the days when they worked 12 or 14 hours a day.

36421. I think you are wrong?—Well, I would like to compare notes on it—I think I am not.

36422. How long is it since the miners in Durham and Northumberland had such long hours?—40 years ago. I am speaking now of the time when they worked 10 or 12 hours—I mean the men were in the pit long hours. The men of Northumberland now do 7½ hours from bank to

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bank, and as compared with the days when they worked long hours I say the decrease of output has not at all been in proportion to the reduction of hours, but my impression is that the Northumberland and the Durham miners get as much coal now in the 7½ hours from bank to bank as they did in the days of the long hours.

36423. You mean of 40 years ago ?—Yes.

36424. That is a long time to go back ?—I am sorry I can go back that far as a boy in the pit.

36425. Surely the hewers did not work 14 hours ?—A man had a place to himself, and he remained in as long as he pleased, and he could go in when he chose and come out when he chose.

36426. That is a matter of fact; but my own impression is that it was not so. It was not so in Durham, at any rate ?—Well, I know it was in Northumberland, and I was in a colliery at that time.

36427. At all events you think there would be no more hewers required to get out the same quantity of coal ?—I am not sure of that.

36428. You think there would be some ?—I think there would be some.

36429. To that extent you would have to have a greater number of places in which the men worked ?—I do not know. I would have to know the pit before I could give that opinion.

36430. If you had more men you would naturally require more places to put them in ?—It depends upon the system upon which you work your pit ?—The pit may be put on an extra shift—whereas now one turn of men is worked they might put on two turns of men at eight hours each.

36431. If you work another shift you require a great many more men. You would have to have double the number of men if you had another shift ?—I have not looked into the alterations so closely. The thing I look at is this, that I think eight hours from bank to bank is too long for a man to be in a pit for his living.

36432. All classes of men ?—All classes of men. It has not been with me a question of cost of production, and yet I do not think the cost of production is going to be increased so much as is thought.

36433. If you did require more men you would naturally have more liability to accident ?—I do not know that that would be so, so far as the individual was concerned.

36434. Per man it might not alter, but the total men employed it would. The more men employed the greater the number of accidents, surely ?—Yes, but the accidents would be less man to man than they were before.

36435. They might be less per man, but still greater than they are now. However, that is a matter of opinion ?—Quite so.

36436. (*Mr. Wm. Abraham.*) Setting sentiment aside, with regard to fining, which of the two systems do you think is the greater deterrent against accidents, fining on the pit bank or taking a man to a court ?—I certainly prefer a man going to the court. I know where the rub comes in with regard to it. I prefer the magistrates dealing with the case in preference to the manager's office on the pit bank.

36437. You have an opinion, I am sure, as to which of these systems is best to prevent accidents, and which induces the miner to be more cautious—is it not if he is taken to the court ?—My objection is to the men being fined by the employer. I am not wishful for them to be taken before the magistrates, but if one of the two things has to take place I prefer their going to court and being tried by an impartial tribunal: because, as I have before said, I believe the other leads to abuse in the trend of things.

36438. In your experience it is not the alternative, if a man is to be fined, betweeen the fine and stopping him, but it is the alternative between the fine and getting into court ?—In that case it would be.

36439. That is, the employers are not stopping everyone that they take to Court ?—No, ours do not. We have had few cases, I am glad to say, but when they have been summoned the employer has not stopped them from their work afterwards, but he has given them their employment again.

36440. That is my point. From what class of the workmen do the management select their examiners, as a rule ?—I could not say exactly, to be correct—the the general body of the men—sometimes it might be an off hand man, and sometimes a coal hewer

36441. Surely they take some trouble to know whether the man is qualified for it or not ?—The management are perfectly satisfied that the man they appoint is quite capable of performing the duties. I am not here to throw any reflection upon the owners in the Bristol coalfield.

36442. That is not our desire; we want to get the facts. Is the size of the district these men have to examine in proportion to their ability to inspect it properly ?—Well, the Government inspector generally goes into that question and makes enquiries whether the man can do it. I say that care should be taken that the district is not too large. I do not say they are too large in the Bristol coalfield. I only say it is a matter that requires to be watched.

36443. (*Mr. Ratcliffe Ellis.*) As to the question of inspectors appointed as Government inspectors, why do you suggest any particular class of competent persons should be excluded ?—Have I suggested that ?

36444. Yes; you say that no person should be appointed to one of these offices of sub-inspector except a workingman ?—My opinion in advising that such should be appointed is because he belongs to the practical side of the business and understands mines.

36445. Do the inspectors, with whom you have no fault to find, understand sufficient of the mines to inspect them if they had time to do it ?—Yes.

36446. Why should not they all be of that class, equally well qualified, and have more of them ?—If you take them from the ranks of the workers I have not the slightest objection.

36447. Why select the ranks of the workers ?—Why not, if you get the qualification amongst the workmen ?

36448. Because I do not want to exclude anyone who is competent from one of the appointments. You say the present inspectors are fully competent if they have the time to do it ?—Yes.

36449. What is the objection to saying "We will appoint more competent men and not deprive any particular class from getting the post" ?—If that class has been a miner I have no objection, but if they have not I do not think they understand a mine.

36450. The inspectors have not been miners, and yet they are fully qualified to do the work. Why do you want to exclude them ?—If they have been miners I do not exclude them.

36451. They have not been miners ?—Yes, some of them.

36452. There may be one or two, but not all. Why do you exclude the class from which they are drawn when you find they are fully qualified men ?—I am not wishful to exclude any individual who is or has been a miner.

36453. Do you want to exclude a person of the class from which the inspectors come, although you admit they are very competent men ?—I can scarcely conceive how an inspector who has not been a miner can be considered an efficient man.

36454. The great majority of the inspectors have never been miners ?—I do not mean a miner in the sense of getting coal.

36455. What do you mean ?—A man who has been a colliery manager or such like—a man who has experience of a pit.

36456. You want a man who has had the experience of pit work, not necessarily a miner ?—Quite so.

36457. Before a man gets his certificate, he must have had five years' experience to qualify him for it ?—Yes.

36458. That is what you mean when you say they should be practical miners ?—Yes, practical miners.

36459. As to inspection under General Rule 38, you say you have no case and nothing but your own suspicion, that the workmen might be put at a disadvantage if they made a bad report ?—It is my whole life's experience.

36460. Mr. John Wilson was here yesterday from the district of Durham. Have you had any experience in Durham ?—I have not had experience in Durham but I have in Northumberland.

36461. Do you know that Mr. John Wilson scouted the idea altogether of the men being afraid to make a bad report ?—I am not answering for John Wilson; I answer for myself.

36462. Your suspicion is that these employers might in some way or another do something to the prejudice of a man who made a bad report ?—I have not said that. I do not put that so strongly. I say, although the employer

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may have the greatest desire that the man should make a clear and true report of what he has found, there is still the chance of it lurking in the man's mind that, inasmuch as his bread and butter is dependent upon that employer, he might have to give a report which he otherwise would not do. I do not want to throw any reflection on the employers in the coalfield from which I come as doing such, but I say that is the natural trend of things.

36463. You think the districts are too large in reference to inspection under Rule 4 ?—I think care ought to be taken to see that they are not too large.

36464. Let me call your attention to Section 42 of the Mines Act: "If in any respect (which is not provided against by any express provision of this Act or by any Special Rule) "—there is no provision in this Act or any Special Rule prescribing the size of these districts—" any inspector finds any mine, or any part thereof, or any matter thing or practice in or connected with any such mine, or with the control, management or direction thereof by the manager to be dangerous or defective, so as in his opinion to threaten or tend to the bodily injury of any person, he may give notice in writing thereof to the owner, agent or manager of the mine, and shall state in the notice the particulars in which he considers the mine or any part thereof, or any matter, thing or practice, to be dangerous or defective, and require the same to be remedied ; and unless the same be forthwith remedied shall also report the same to a Secretary of State." Then there follow provisions which give the owner an opportunity of having that settled by arbitration, or if he does not do that he becomes guilty of an offence against the Act. You say you have not in your mind any cases where the districts are too large, but it is a matter which wants watching ?—Yes.

36465. Is there anything which you can suggest beyond this ?—Not if this is carried out.

36466. So far as this is concerned, it gives the inspector full power to do what he ought to do ?—I would prefer it if the wording were so altered as to give the miles that any examiner ought to travel in the pit.

36467. Is it possible, considering the want of uniformity and the conditions of the various pits, to put it in miles ?—A maximum could be fixed.

36468. What is your idea of a maximum ?—I would not like to say. That would depend upon the nature of the district the man is to travel. In one district a man may have a lot of explosive gas to contend with.

36469. Exactly. In this section it gives the inspector the right to prescribe or to prohibit, at any rate, a district which is too large ?—Yes ; but if the Act also said it shall not be more than so many miles, I think it would be better.

36470. Let me put this to you upon that: Suppose you put the largest number, a maximum, then there might be an excuse, and they could say " Oh, it is not so many miles, we are within the distance " ?—That is so.

36471. Do you not think it is better to leave it as it is here, giving the inspector the power to judge in each particular case what he thinks is a sufficient size, and to tell the manager if he has any districts too big, " I think you have that district too big " ?—No ; I agree to a maximum. I conceive if a maximum was fixed it might be found that many are travelling beyond that now.

36472. At any rate this clause which is in the Act of Parliament meets your view, except you think it might be strengthened by putting some maximum distance?—Yes.

36473. But what the maximum should be you are not prepared to say ?—No ; it depends upon the nature of the district that the man has to travel.

36474. Upon the question of fines I suppose you consider it is important that discipline should be maintained ?—I do.

36475. Do you think that the men have got to that perfection now that they will maintain discipline without some pressure being put upon them, and some punishment for breaches of it ?—I think they are still in common with the employers.

36476. Both guilty ?—Both guilty.

36477. And, therefore, it is necessary that there should be some punishment inflicted in cases of breaches of discipline ?—Naturally.

36478. That is in the interests of safety ?—Quite so.

36479. Now let me call your attention to Section 50 of the Coal Mines Regulation Act: " Every person who contravenes or does not comply with any of the General Rules in this Act, shall be guilty of an offence against this Act ; and in the event of any contravention of or non-compliance with any of the said General Rules in the case of any mine to which this Act applies, by any person whomsoever, the owner, agent and manager shall each be guilty of an offence against this Act, unless he proves that he had taken all reasonable means by publishing and to the best of his power enforcing the said Rules as regulations for the working of the mine, to prevent such contravention or non-compliance." The effect of that section is this—it is peculiar to this Act of Parliament and probably to the Factory Act—that a person who is absolutely and entirely guiltless of any offence may be made answerable for an offence committed by someone else unless he does two things: first of all publishes the regulations ; and, secondly, to the best of his power, enforces them. It is the owner, agent or manager may be responsible for the act of a collier who breaks a regulation behind his back and without his knowledge, unless he can show he has done the best he could to prevent it. At the present time the manager has to do the best he can to preserve the discipline of his pit. Do you say he should be prevented from enforcing that discipline except either by discharging the man or bringing him before the magistrate ?—I am distinctly opposed to any fine being inflicted at the colliery office.

36480. Do you assert it as the opinion of your district that the managers should enforce these regulations either by bringing the man before the magistrate or discharging him ?—What I do say is that I am distinctly opposed to fines being made at the colliery office.

36481. You will not go any further than that ?—No.

36482. You said you did not desire the pit bank to be made a Magistrate's Court ?—That is so.

36483. Are you familiar with the Truck Act ?—Not intimately.

36484. What is the particular character of the Police Court that you wish to exclude from the pit bank ?—The employer taking upon himself to impose fines on men for what he considers breaches of the Act.

36485. As a magistrate does ?—As a magistrate would not do in many cases, in my judgment.

36486. When a magistrate fines a man, the man has no option but to pay or go to prison ?—That is so.

36487. Is it your opinion that the colliery manager has the same right, or exercises the same right ?—So far as the fining of the man is concerned he does it in many cases.

36488. The Truck Act provides that if he fines a man, unless the man consents to be fined, or he fines him an excessive amount, even if he consents, that that has to be recorded, whatever the fine is, and the manager can be brought before the magistrate, and if the fine is excessive the man can recover it, and the manager can be fined for a violation of the Truck Act. There is a great difference between that proceeding and a Police Court proceeding ?—I know there is.

36489. With that information as to the protection given to men against unjust fining, you still think that the manager should be prevented, with the consent of the men, from inflicting a fine, and that he should be obliged to take the men before the Police Court ?—I think he ought not to be allowed to deduct anything by way of fine for any misdemeanour on the part of the workmen.

36490. You say not only must the employer be prevented from fining, but, if the workman wishes to pay a fine rather than be brought before the magistrate, he is not to be allowed to do so ?—I have said, I believe, the system is a pernicious system.

36491. You do go as far as that, do you not ? I do not wish you to go so far as that unless you wish it: if the workman wishes to pay a small fine rather than be brought before the Police Court and pay a larger fine, he is not to be allowed to exercise any discretion in the matter ?—I believe the workman is not in a position at the present time to exercise an opinion.

36492. Do you say what I put to you ?—I have not said it.

36493. Do you say so ?—I cannot go further than I have done.

36494. Do you say the law ought to be so altered as that, under those circumstances, it would make the workman guilty of an offence against the Act if he consents to be fined ?—Believing that that would perpetuate the system I am opposed to, I can only say if he has committed a

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misdemeanour in the pit I prefer his going before the magistrate and not be fined by the manager at the pit's bank.

36495. Do you say you prefer not to answer the question ?—I think I have answered the question.

36496. No, you have not—whether you would prohibit by law a workman who wishes to be fined ?—I would prohibit by law a fine being made by a colliery employer.

36497. Even although the workman wished it ?—I can say no more than I have said.

36498. You approve of baths like they have in Germany and France ?—I do.

36499. Would you also make it compulsory upon the workman that he must have a bath before he left the mine ?—I would.

36500. And that if he did not have a bath there would be a punishment ?—Yes.

36501. Do you think you have the sanction of your Association for that ?—I would not like to be so sure about that—it is new. The question with me is as to whether it would be wise.

36502. Is the Forest of Dean within your district ?—No.

36503. Are you aware that in the Forest of Dean the miners themselves have now changed their opinion about the eight-hours question, and are objecting to the limitation of eight hours from bank to bank ?—Well, they do some wonderful things there.

36504. Do you know that is one of the things they are doing ?—Well, it does not affect me in the slightest nor my opinions after 20 long years' experience.

36505. They are doing it there ?—They are a world of their own, I think.

36506. You think all these things are going to be removed by the nationalisation of mines ?—I do not—I think a number will.

36507. You think the mines will be worked more safely ?—I think so.

36508. What is the proceeding for nationalising these mines ?—I think the Members of Parliament might answer that.

36509. You are the first witness we have had who has advocated the nationalisation of mines on the ground of safety. How do you go about it ? Do you buy them ?—Well, yes, so far as I know.

36510. Are they to be bought by someone ?—There are certain things which have been nationalised in this country, and I should nationalise them in the same way as the Post Office has been nationalised.

36511. Take the mines: is your idea that the Government should buy up all the mines ?—Yes.

36512. Pay for them, I suppose ?—

(*Chairman.*) I do not think that is a question to come before the Commission.

36513. (*Mr. Ratcliffe Ellis.*) I do not want to pursue it, except, of course, if a witness suggests the nationalisation of mines as one of the means of procuring safety, then, before the Commission could come to a conclusion about it, they ought to know more. However, I will not pursue it. With respect to the number of accidents in connection with long hours you have no statistics ?—I have no particular statistics.

36514. Are you aware that a return has been obtained once or twice by Parliament showing the hours of the shifts in which accidents happened ?—Yes.

36515. Do you know in that it appears that the accidents happen rather in the earlier hours of the shift than the later hours ?—I am not aware of that for the moment.

36516. Would it not be likely to be so, that after the place is at rest the men who come there to work first are more liable to falls of roof than the men who have been working and keeping their eyes on the roof and putting the props up all day ?—I could not say.

36517. You know there was a return ?—There was a return.

36518. And it showed that the larger number of accidents occurred in the earlier hours of the shift, and not in the later hours of the shift ?—I know there was a return but I am not aware of that fact.

36519. (*Mr. Enoch Edwards.*) I understand you to say you have no complaint against the present Government inspectors ?—I have not, so far as their present time will allow.

36520. In your judgment the area they cover and their duties are too great to enable them to give the attention they ought to give ?—That is my opinion.

36521. In answer to Mr. Ratcliffe Ellis about the qualities of these inspectors, you urged that they should be practical men ?—Yes.

36522. Of course you understand now that all of them who take certificates must have had practical experience in a pit as a qualification before they took them ?—Yes.

36523. So that in that sense the present inspectors must have experience of pits ?—Yes, otherwise they could not have the certificates.

36524. Do the men in Bristol avail themselves of the examination under Rule 38 ?—Much more than they used to—at all our pits now save one. We have local examiners going round every month.

36525. Is there a book in the office in which they enter their report ?—Yes.

36526. It is the report of what they find and their experience of the actual condition of things ?—Yes, and they also send on a copy of that report to me which is entered in our minutes.

36527. Have you had any cases of discharging men for making that report ?—No.

36528. You have no complaint to make in that respect ?—No, I have no individual complaints to make at all; in fact, the owners have expressed themselves to me that they are wishful it should be done.

36529. On the strength of those reports, so far as your experience goes, there is no advantage taken of the men ?—Quite so.

36530. As to the class of inspection, that is the inspection of officials and their qualification, I do not know whether my colleagues understood what you meant when you said that these examiners should have the qualification of a second-class certificate. You do not suggest that firemen and deputies who make the examinations in one or two hours in the morning before the workmen go in, should necessarily have a first or second-class certificate ?—I think they should make clear by some method that they are capable of carrying out the duties allotted to them, and I do not know of any other method than their passing some standard of examination.

36531. The first-class certificate involves technical knowledge ?—Yes.

36532. You may have a good examiner of a pit, but he could not construct an engine or tell how to construct it ?—Just so.

36533. Do you mean that the deputy or fireman appointed by the officials should in some way have some sort of examination to test their efficiency ?—I do: I think it is most important.

36534. That either the inspectors or someone should satisfy themselves as to their fitness ?—Yes, especially the inspector I think should.

36535. You have been exceedingly emphatic about your opinion of fines in the office ?—I have.

36536. Mr. Abraham put to you a phase of it, but I do not know whether you satisfied him with your answer. Do you base your objection to the principle generally as a principle, or do you think that fining in a colliery office would be a less effective means for safety than fining before a court ?—I think it is pernicious for an employer to fine—it leads to a pernicious result I think—the man is not in a fair position.

36537. Let me put it in another way. Assuming that the employer has power to fine, if the workman is fined 2s. 6d. or 5s. in the colliery office, is that likely to be as great a deterrent and warning to him to be careful in the future as taking him before the court would be ?—I think it is a deterrent, but I think there are many cases where men are fined, whereas if they went before a magistrate it might be a question whether they would be fined or not.

36538. There may be two opinions about it, of course, and there you would have an opportunity of explaining his view of the matter ?—Yes.

36539. You do not seem inclined to go further than state generally that you are opposed to fines ?—I am opposed to fines. Where a man has deliberately broken a law, if he himself agreed with the employer to pay 2s. 6d. or some other sum, it would be an incidental matter and he might do it; but what I am assuming is this, where a man now pays in many cases, the man is not in a position to refuse, because he is not before an impartial tribunal.

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Mr. W. Whitefield.

23 Jan., 1908.

36540. Of course the fines in the colliery office may be for other purposes than violation of rules ?—I think it widens with some particular managers. For instance, we have one particular manager who makes it his business to impose fines much more than the other managers of collieries do.

36541. Whatever disadvantage or inconvenience to anyone, you think the proper place is the Court ?—I do.

36542. You expressed an opinion about the hours of work. This is the first time we have had the question of hours raised before this Commission. In reference to your own locality you say you have no statistics, but it is your belief that accidents would be less if they worked shorter hours ?—That is so.

36543. It is suggested the shorter the hours the greater the hurry and pressure. What you are protesting against is the tendency to hurry and pressure. Tell us what your experience is in that respect: are the accidents less or more where they work shorter hours now ?—So far as I know they are less in the short hours district. In our district (Bristol) accidents are very prevalent.

36544. Of course if they strike and cease work for six months there are no accidents at all. People argue that with lesser hours we shall have more accidents, but you do not agree with that ?—No, because the senses of the workmen are keener when they work less hours.

36545. On the question of baths, you used some term about the men having black faces and that being against them?—I believe it is, too.

36546. The Corporation of Bristol do not own their tramways, do they, but it is a private company ?—A private company.

36547. They object to colliers riding in their tramcars, do they not ?—They did object.

36548. I suppose because of the dirty clothes and black faces ?—Yes.

36549. It is not for that reason you suggest colliers should be washed ?—Not for that reason—that is an offside reason and it is a very important one to the collier. I believe without the black face going amongst the multitude his standard would be raised immensely.

36550. You think that for the sake of health generally, baths should be placed at the collieries ?—Yes, from the point of view of sanitation.

36551. Do you prefer that to having baths in the workmen's homes ?—Yes, I do—away from his family. I know there are men in our coal-field who wash from head to foot; but where a man has a family around him it is not always convenient for him to strip himself naked and wash himself in his home. In my part they are amongst the cleanest colliers I know of.

36552. (*Mr. Smillie.*) Does your society defend members who are charged with breach of the Mines Act ?—If we are satisfied that the man has done a wrong we try to exercise a care not to support him; but if it is a doubtful case we do support him for the sake of the man getting justice.

36553. You would not defend a person if you knew he was guilty of a deliberate breach of the Mines Act ?—No; because we should feel we should be in the eyes of the employers placing ourselves in some degree in the position of accessories to such things.

36554. Colliery managers are sometimes charged before the Court with a breach of the Act ?—Not often.

36555. You have known of such cases though of colliery managers being charged by the mines inspectors ?—Yes, we have had a few cases, but they do not often occur—not so often as they would do if they were workmen.

36556. You would not be favourable to giving the mines inspector power to fine a colliery manager £5 rather than take him to Court, would you ? You do not think that would tend to discipline ?—I do not; I think the Court is the proper place.

36557. If it is a proper place for a manager to be tried, it is the proper place for a workman to be tried ?—Yes.

36558 With regard to inspection under Rule 38, the owner of a colliery might be anxious that a true report should be made of the condition of matters, but there might be some under officials who would not be so anxious that a true report should be made—I mean a true report might sometimes reflect upon some under officials in the mine that they were not doing their duty ?—That is so.

36559. Is it not possible for under officials sometimes to make a miner's life miserable and for the owner to know nothing at all about it ?—Oh, quite so.

36560. And the fear of that might deter a person, perhaps, from always giving a true report ?—Yes; the whole trend of the individual gain makes the official and the manager use pressure to keep in darkness sometimes facts that would otherwise come to light. That is my experience as a miner.

36561. You are aware that on the Continent the miners have their pit clothes dried at the mines ?—That is so, and I have seen it at a mine in Belgium.

36562. Are you aware that they must bring a clean suit of pit clothes weekly or fortnightly to the pit ?—I am not aware of that.

36563. Do you not think if the washing took place at the mine, and the drying of the clothes took place there, it would be necessary that some precaution should be taken to keep the clothes clean ?—I do think so.

36564. It might be wise, perhaps, to use compulsion in a case of that kind to ensure it ?—Yes.

36565. In the interests of cleanliness and health it might be sometimes necessary perhaps to compel persons to wash themselves ?—Yes, in the interests of public good.

36566. At the present time the Public Health Act, I think, brings pressure to bear on persons to keep themselves clean ?—Yes, in their own homes.

36567. And if it was necessary by law that baths should be provided and drying stoves also, it might be necessary to force some individuals who did not want to wash to clean themselves in the interest of the whole ?—Quite so.

36568. (*Mr. Cunynghame.*) You are aware, of course, that a large number of the accidents occur by reason of falls of roof and sides ?—Yes.

36569. I know you have made a suggestion in your evidence, but have you any other suggestion to make for diminishing those dangers ?—I think I have said all I have to say upon it; the reduction of hours is one, increased inspection is another.

36570. (*Chairman.*) I want to ask you one question about fines. Supposing a man was to come to you and explain the circumstances under which a manager proposed to fine him, say half-a-crown, and after hearing his story you came to the conclusion that undoubtedly he was guilty of a breach of discipline, would you advise that man not to pay the fine, or would you insist on his going before the magistrate ? Would you say that as a matter of principle you would advise him to go before the magistrate ?—I would not take the responsibility as the leader of the man of advising him not to pay the fine, because I should be afraid of lending myself to cases where men ought to be punished. It is because part of it is pernicious and unfair it makes me lean strongly to a magistrate's court.

36571. Even if a man was to come to you under those circumstances, and you were persuaded in your own mind that it was a perfectly fair and just thing to ask him to pay a fine of half-a-crown, you would refuse to give him any advice one way or the other ?—I should not advise him on the matter. I should say, generally speaking, the fine ought to be made by the lawful authority in the country and not by an individual who might be using his own caprice in the matter.

36572. At the same time you still doubt, as you seem to have doubted when Mr. Ratcliffe Ellis asked you the question, as to whether it would be advisable that the Legislature should absolutely prohibit a man from agreeing to a fine with the management ?—It is because of where it leads to.

36573. Will you answer that question or do you prefer to leave it unanswered, as to whether you would go so far as to say that a man ought to be forbidden by law to make an agreement with a manager as to a fine under any circumstances whatever ?—I would prefer in every case the proper authority should determine as to whether a man should be fined, and if so, what amount—as a means of getting rid of some of the pernicious features of it.

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Mr. THOMAS MANSELL called and examined.

36574. (*Chairman.*) I understand you have come here to give evidence on behalf of the South Staffordshire and East Worcestershire Miners' Association?—Yes.

36575. What position do you occupy in that Association?—General Secretary of the Miners' Association.

36576. How long have you held that position?—About 13 years now.

36577. Have you had any special instructions from your Association as to the points they wish you to put before this Commission, or do you simply stand upon the general knowledge you have of the miners' wishes owing to the position you have occupied during the last 13 years?—The general knowledge of the miners I represent.

36578. You say with regard to administration you think there is room for an increase in the number of inspectors of mines in your district?—Yes.

36579. I suppose you mean Government inspectors of the district class?—Yes.

36580. Do you consider it is necessary to increase the number of Government inspectors of the present class of inspectors and assistant inspectors, or do you consider that the increase might be made solely by way of adding a third class of inspector, who would be in a different position from the others?—I think there is great need for an increase in the Government inspectors—the present assistant inspectors.

36581. You would like more assistant inspectors and more district inspectors?—Yes.

36582. How many more?—For the Black Country proper I should think one or two would be sufficient.

36583. One or two in your own district, which you know about?—Yes.

36584. How many inspectors have you in the district you are secretary for?—We have Mr. Johnstone, who represents the Staffordshire districts, who visits us occasionally, and Mr. Makepeace, and another assistant.

36585. You only belong to one district?—That is all.

36586. You say you think there is room for an increase in the number of inspectors of mines in the district with which you are acquainted?—Yes.

36587. Do you consider there ought to be more than one district inspector and two assistant inspectors?—I should think more assistant inspectors would do, because we have an admirable man in Mr. Johnstone.

36588. You would have three or four more inspectors besides the two at present?—Speaking from my knowledge of the Black Country I think if there was an additional one for the Black Country alone proper, it would make a big improvement—I think it would minimise accidents.

36589. Would you supplement that by another class of inspector—working-man inspector?—I may say that the inspection under General Rule 38 has never been brought into effect in our district.

36590. It has been suggested before us more than once that it would be extremely desirable to have a great deal more Government inspection than at present obtains, and there should be a new class of inspector appointed who should have, say, £3 a week, or some salary of that kind, and who should be appointed from, mostly at all events, men who have worked in the mines?—Yes, I quite agree with that.

36591. Some of the witnesses have said that the duties under Rule 38 might well be done by these third-class inspectors, and other witnesses have suggested that besides the third class inspectors this inspection by the men under Rule 38 should still go on. As regards Government inspection, to take that first, how often do you think a mine ought to be inspected by a Government inspector of some kind, either the district inspector, assistant inspector, or third-class inspector?—I should think in a dangerous coalfield like ours, once every three months—I mean Government inspection.

36592. The whole of the pit?—Yes.

36593. Not only inspection by sample once every three months, but the whole of the pits in the district should be gone through by some sort of Government inspector?—Yes.

36594. And that, I suppose, would necessitate the appointment of at least half-a-dozen, if not more, of these third class inspectors, besides the three assistant inspectors you want?—Yes.

36595. Therefore, you would have something like a dozen inspectors of some kind in your district?—Yes.

36596. If you had that Government inspection do you still think it would be desirable that the men should continue to have the power of inspection by their own men under Rule 38?—Seeing it has never been brought into effect in the Black Country I do not think that would matter.

36597. It never has?—Not to my knowledge. It is too great a risk for men to volunteer and be appointed to undertake that duty; they would have to do it under pain of being discharged.

36598. If they gave an unfavourable report?—Yes.

36599. That is your belief?—Yes, from practical experience.

36600. Your belief is that the miners in your district would be willing to undertake the duty of examiners if they were not afraid that they would be dismissed if they made a bad report?—Yes.

36601. That is the only reason to prevent inspection under Rule 38 in your district?—Yes.

36602. Could that difficulty be met supposing the men were to appoint two of their number, or more if they liked—any number they pleased of their own members—to be perpetual inspectors, not to work at the pit at all, but spend the remainder of their lives so far as they were engaged in mining pursuits, simply and solely in this kind of inspection?—It would be an improvement on the present system.

36603. Do you think under that system the men would object to going down the mines?—I do not think so.

36604. You think if they were empowered to appoint a certain number of themselves who should do nothing whatever but this inspection, you would find men willing to do it, and the men would be willing to pay them for it—or how should they be paid?—I do not think the men would be willing to pay the independent men like that—men who would not work in the pit.

36605. Then that would not meet the difficulty. If other people were to do it there would be no objection?—No.

36606. And you could easily get men to do it?—Yes.

36607. But you do not think the men would consider it worth their while to pay men to inspect under Rule 38?—I think it would be rather difficult to persuade them to do so.

36608. With regard to the firemen, or examiners, or deputies, or whatever you call them in your district—the under officials who have to look after the safety of the miners under Rule 4—you say they should possess knowledge of the various gases found in mines, and their effect upon human life, together with a good sound practical experience as a miner?—I do.

36609. Do you think it would be necessary that they should pass an examination for a first or second-class certificate?—Second-class certificate.

36610. Do you also think it necessary that they should have knowledge of first-aid ambulance work?—Yes, that is essential in my opinion.

36611. You say nothing about the size of the districts?—The district which I represent covers an area which employs a little over 7,000 men.

36612. I mean the firemen's district. Do you say in your district that the districts assigned to the firemen are too large for them to carry out their duties properly?—I do not think so, because our pits are very small pits compared with the other pits in the British coal-field.

36613. You think the districts you know of are not too large?—Not the firemen's districts; but the competency of the individual is another matter.

36614. As regards the size of the districts, you have nothing to complain of?—No.

36615. As to the competency of these firemen, you say that the best men are not appointed?—I do say so from my own experience.

36616. What reasons would you assign for that?—Under our butty system I think there is more preference given to relations and to those people who come and do bullying about the pit and rush the men into the work.

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Mr T. Mansell.

23 Jan., 1908.

36617. You consider the firemen are appointed not entirely because they are persons who are capable of looking after the safety of the miners, but also, and perhaps chiefly, because they are able to see that the men do the maximum amount of work?—Yes, they do see that, and at a very high speed too—they do it at a speed which renders it more dangerous for them.

36618. You consider the firemen's duties ought perhaps to be confined to looking after the safety of the miners, and they ought not to have anything to do with the general management of the mine, except as regards the safety of the miners?—Yes.

36619. And having to do other things makes it desirable, from the point of view of the management, that they should be men who possess qualifications which are not always found in conjunction with the knowledge of how to protect the men?—Yes.

36620. You would be in favour, I imagine, of the firemens' duties being more strictly defined, and of their being restricted in their duties to looking after the safety of the men?—Yes.

36621. Then with regard to the establishing of Special Rules, you have nothing to complain of in the way of setting them up?—No, I do not see any ground of complaint.

36622. In your districts are the men consulted at first? Supposing an owner wishes to set up rules, does he consult the men before he sends them to the Home Office for consideration?—Well, it has not been so done in the past.

36623. They first of all send them to the Home Office, and after they send them to the Home Office the men have an opportunity of considering them and not before?—Yes.

36624. Do you not think it would be an advantage that the men should have an opportunity of considering the Special Rules at an earlier period?—Yes.

36625. But that has not been the case in your district?—Not in the past.

36626. Would you rather that the men were taken into the confidence of the master at an earlier period?—I do not say the system in the past is a good system. I think the workmen should be consulted in framing the Special Rules; but, so far as our Special Rules are concerned, I see no objection to them at present.

36627. The Special Rules, you think, are all right?—Yes, for the district.

36628. What you find fault with, if you do find fault with anything, is because under the present system the men are not consulted at as early a period as they ought to be?—If the men were consulted and discussed the question together, there might be some improvement made in the present Special Rules—but they never have been consulted.

36629. You are very well acquainted with the Special Rules?—Yes. The rules are fixed up so that the men may consult them. I think the men ought to be consulted before they are sent up to the Home Office.

36630. At an earlier period than they are?—Yes.

36631. The Home Office see that the opinion of the men is taken before they ratify the rules?—Yes.

(*Mr. Wm. Abraham.*) He says it has never been done in his district.

36632. (*Chairman.*) Have you sent up any sort of petition to the inspector that you would like to consult the men about the rules before they were adopted by the Home Office. Surely the Home Office would see you had some opportunity?—I should think so.

36633. (*Mr. Wm. Abraham.*) The question is this: have you had any opportunities of consulting the employers in making Special Rules for your district?—No, we have never been consulted up to now.

36634. (*Mr. Cunynghame.*) When were the rules made. Was it 20 years ago?—Yes, it was.

36635. (*Chairman.*) What is the date of the most recent rules adopted by the Home Office for the Black Country district?—I could not give you the date; it was before my time.

36636. There are some timbering rules within the last five years—in 1902—and your statement is that the men were not consulted before the establishment of those rules?—That is so.

36637. I understand that is a very unusual circumstance and one not likely to occur again?—The custom in the Black Country coalfield is very much regulated by Lord Dudley's office; he holds the predominant part of the Black Country coalfield, and after the Special Rules have been framed, and after they have been consented to by the office, that is the Mining Department, they have been generally adopted in the Black Country, but I never remember being consulted in my life.

36638. (*Mr. Cunynghame.*) The timbering rules are not in force in your county?—No.

36639. (*Chairman.*) Then you have no complaint, except as to rules which were drawn up a great many years ago, when the Home Office were not so particular about consulting the men as they are now?—That is so.

36640. (*Mr. Ratcliffe Ellis.*) That was before your time?—Yes.

36641. During your time no Special Rules have been set up at all?—No. I may say we should not adopt the system of timbering as suggested in the rules.

36642. (*Chairman.*) Then it comes to this, during the whole of the time you have been the miners' secretary no Special Rules, except the Electrical Rules which were framed by a Committee on which the men were represented, have been established by the Home Office in the Black Country—not since 1888, but you may rest assured that the practice of the Home Office now is, and has been, that if any rules are established the men should have an opportunity of considering them before they are established?—I am glad to hear it.

36643. Then as to accidents, you say that too much care cannot be displayed in timbering roofs and sides, especially in your Black Country thick seams, and you think there could be an improvement in this respect by a more frequent visit of inspectors. Is that the only suggestion you make as regards timbering?—I think if there were more frequent visits of inspectors there would be greater care in fixing the timber up. In our thick seams there is plenty of room for improvement provided there was someone to constantly overlook it.

36644. Is it done by special men or ordinary hewers?—I think there is too much carelessness in that respect, they do not put the highly skilled men as often as they should to timbering.

36645. You say that in difficult places the men should be constantly supervised by experts in timbering, and should not be allowed to set their own timber?—That is my view.

36646. In addition to that, even although there are expert timberers looking after the timbering in the thick seams, you still think it is desirable there should be an inspection by Government inspectors at least once in three months?—Yes, I suggest once in three months.

36647. As to haulage, you say where it is favourable you would extend the principle of mechanical haulage, as it would be less dangerous than the old system of horse haulage. Horse haulage is going out now very much, is it not?—We cannot do very well without it in some of our smaller pits.

36648. But where you can do without it you do do without it?—Yes.

36649. I do not think you have anything to complain of in that respect, as to there being too much horse haulage?—No, but I should extend the principle of mechanical haulage where I could.

36650. You would extend the use of the safety-lamp?—Yes.

36651. Do you not think the safety-lamp is sufficiently used in your district?—Where necessary, I think the safety lamp is sufficiently used in the Black Country district, because we are not so much subject to inflammable gases as they are in other parts of the British coalfield.

36652. You have no complaint to make with regard to the non-introduction of safety-lamps in your district?—No.

36653. You have nothing to say on the system of examination for certificates for managers and under-managers, and you think the district is satisfactory?—That is the first and second-class certificates.

36654. You consider the system of examination for certificates for managers and under-managers in your district to be perfectly satisfactory?—Yes.

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36655. As regards ankylostomiasis, you say the seams are so shallow and vary so much in temperature, and are so much subject to water passing through the workings, that you do not think it possible for the disease to prevail ?—Yes.

36656. You have no fear of ankylostomiasis ?—No.

36657. (*Mr. Cunynghame.*) In your district the charter master system largely prevails, does it not ?—Yes.

36658. I am not sure I thoroughly understand the whole of that system. It seems to me to result in a man acting practically as manager of the mine who has had no certificate at all ?—Yes, in a good many instances.

36659. I am not sure whether the letter of the Act is not broken, but certainly the spirit seems to be broken, if you have a man directing operations who has never had any proper certificate ?—That is so.

36660. Just tell us a little about your views of that charter master system generally ?—I have had the pleasure of going through the report of our late inspector of mines, Mr. Atkinson.

36661. I would rather you would give us your views ; we have his views. The value of the evidence is your view. Do not take it from him ; contradict him or anyone, if you like, but give us your view ?—My view is this : first of all, I must endorse the view of Mr. Atkinson, because we have discussed this matter together in years gone by. I think the principle of the butty system tends to increase the number of accidents, which is fairly demonstrated by the record for the year ending 30th June, 1907. I have had the opportunity of getting out statistics which are not generally available. We have been working under a compensation scheme fund in the Black Country, and for years I have been auditor, the consequence being I am able to give you statistics that the inspector could not possibly get at.

36662. Will you let us have them in evidence ?—First of all our death rate in the Black Country proper from falls of roof is 2·342 per 1,000. If you compare that with falls of roof in the whole of the British coalfield, which works out at ·78 it is practically equivalent to three times the average of the whole of the Kingdom, and it is a clear indication that there is something imperfect in the butty system, so far as the protection of the life and limb of the collier is concerned.

36663. You must compare things which are like one with another. Is the 2·34 falls from roofs and sides only ?—Yes, only.

36664. How do you get at the figure of 2·34 ?—From Mr. Johnstone's, the Government inspector's report.

36665. (*Mr. Cunynghame.*) Have you ever had any practical experience of this butty system ?—I have worked under the butties.

36666. In what capacity ? Were you a doggy ?—No. I have worked filling, and what we call pike work and picking-in. I have worked under the butty system, I was going to say, practically all my life.

36667. Give us an impression without mentioning names, of the mining capacity of the men conducting the operations practically in the pit ?—I have had the experience of working under the butty system, and I have had the experience of working under the system of what we call general management, and I find you have not got the time allowed to fix up your timber and do your work properly under the butty system as you have under other systems. We have other employers in the Black Country apart from those under the butty system. The man engaged to overlook the other man, in most instances is some distant relative of the butty, and he is one of those who keeps worrying you all the time of the work, and the consequence is you are being bullied and there are a good many men certainly who rush into dangers which they would not otherwise do if there was decent management.

36668. What I wanted to ask you was as to the capacity of the management, and your knowledge of mining under the butty system, as compared with mining under the system such as it is in other districts ?—Do you refer to the general manager or his subordinates ?

36669. I refer to both ; I want to hear them separately ?—In so far as the capacity of the general manager is concerned it is second to none in the Kingdom, but, owing to the great number of pits and the great distance they are from each other, it is impossible for him to give the supervision he otherwise would do if there were more managers.

36670. You mean that really the general manager is general manager only in name, and there is not a manager strictly for that pit at all ? He covers the whole coalfield, and the consequence is that he cannot do it properly.

36671. Still, even although they are very small pits and necessarily worked, perhaps, by small people, would it be, in your opinion, advantageous that some test of qualification should be required of a man who may be left the whole day entirely in charge of a pit ?—Yes.

36672. (*Mr. Wm. Abraham.*) Who may be the gentleman you call the charter master ?—It is the man who has got the pit. Strictly speaking, he takes a pit under his lordship and he works that pit at so much per ton. In some cases he has to find his own timber ; in other cases he does not. However, he takes the whole responsibility and the more he gets out the more he gets for himself.

36673. He is there in the position of a contractor ?—Yes.

36674. Does he, as a rule, know anything about it ?—As a rule, he has sprung from a collier and saved sufficient money to take on the charter master system.

36675. He might be a good man, but is it necessary do you think for him to possess a certificate of management either of the first or second-class ?—If he is going to take on any part of the management of the mine he should possess a second-class certificate.

36676. As a charter master he is not compelled to do it ?—No.

36677. Then he has to engage someone else ?—Yes.

36678. Who is the general manager of the pit ?—It is rather difficult to answer that question, because the general manager of one pit is perhaps general manager of a dozen or fourteen.

36679. Who is the active manager ?—The one selected by the butty.

36680. The one selected by the charter-master himself ?—Yes.

36681. What is his qualification ?—In some instances there is no qualification at all.

36682. This is a most important statement you are making. From what you have said it appears you might work in a pit without any practical manager, only someone named by the charter-master ?—That is so.

36683. Then how is it supposed to be working under the Mines Act ?—I was going to suggest that I do not think the Act of Parliament is so much contravened and ignored in any other part of the Kingdom as in ours.

36684. What is the class of men who are doing the timbering as a rule ?—They are men who have had practical experience.

36685. Are they men appointed for that work specifically ?—No. In addition to timbering they have to do the picking-in as we call it, that is opening the wastes out and dropping the different sections of the coal.

36686. What is the thickness of the seams you are working ?—Ten yards generally.

36687. That in itself is a serious danger ?—Yes ; it is the most dangerous seam of coal we have in the Kingdom.

36688. And requires the best class of man possible to be the timberer ?—Yes.

36689. And calls for very high-class supervision ?—Yes.

36690. In the absence of those qualifications you find the great reason why there are so many accidents ?—That is so.

36691. (*Sir Lindsay Wood.*) I think you said you would advocate that the mines should be inspected every three months ?—By a Government inspector.

36692. Either by the head inspector or assistant inspector or the third class inspector—the workman inspector ?—I do not object to the latter ; but over all the others, apart from the inspection that now takes place, I would suggest that an independent Government inspector should make his visit about once every three months.

36693. You think there should be three classes of inspectors, the head inspector, the assistant inspector, and a third class inspector, paid by the Government ?—Yes.

36694. And one of those three should inspect the mine every three months ?—Yes. They may do so oftener than that. but at least once in three months.

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36695. Would that not do away with the necessity of the inspection under Rule 38?—It has never been in operation in our district.

36696. But would it?—It would.

36697. If the mine is inspected every three months there would be hardly any necessity for the men to inspect it, if it is done by the Government?—Quite so.

36698. You say the reason this is not carried out in your district is that the men who would have to make the inspection might be discharged or punished in some way by the management?—That is so.

36699. That you said you found from practical experience?—Yes.

36700. Have you had any cases of the owners punishing anybody for inspecting the mine in that way?—No inspection has taken place; we have always been afraid to do that.

36701. How do you get the practical experience?—Working in the thick coal seam from a boy of 12 years of age until I was appointed to the Miners' Association; I say we have been afraid to put that into operation.

36702. You have found it difficult. You could not have practical experience without doing it?—I mean practical experience in the coal working, not in reference to inspection.

36703. You said you had practical experience, or rather you formed your opinion from practical experience, that the men would be punished by the owners?—That is a wrong impression. I meant from practical experience of the mine it would be inadvisable, where there was a risk of being victimised, to put that Rule into operation in the Black Country when I worked in the pits, and the same would apply to-day, no doubt, in our district. They are not large pits. The difficulty is this: out of 20 or 40 men where are you going to get two to volunteer and run a risk of being discharged.

36704. Are you aware that the witnesses we had yesterday said there was no evidence in their district of any men being victimised in consequence of it?—Perhaps they are placed differently to us.

36705. Yours is rather a particular district altogether?—Yes.

36706. You thought horse haulage was more dangerous than mechanical haulage; that also must be applicable to your district only?—Yes, more so than anywhere else, I should think. We have a great number of accidents from horse haulage.

36707. (*Mr. Enoch Edwards.*) How far does the butty system obtain in South Staffordshire now? Does it extend anywhere beyond Earl Dudley's mines?—Principally under his lordship. I may say there is very little coalfield beyond his lordship's area in the Black Country.

36708. Thirty years ago all coal mines in Staffordshire, north and south, were worked by butties. Do you remember that?—I daresay I do remember it. That would be just when I started, but I did not know it was all worked by butties.

36709. The northern end of it at one time had nothing but butties, and they were all butty collieries all the way through. I want to be sure whether the butty, the contractor, has anything to do with the appointing of officials under the Act. You will find that according to the present Rules the firemen shall be appointed by the owner, manager or agent, but shall not be a contractor. The law is pretty clear now?—Yes, but I say that law is contravened under our butty system, as will be found if it is investigated.

36710. Do you suggest that the butty himself, the contractor, has the appointment of these officials?—Yes.

36711. Are you clear that the contractor, the butty, does appoint officials?—Yes. Let me be clear that you do not refer to the general manager?

36712. The men who are in daily charge of the pit?—Yes, he appoints them and pays them, and he goes to the same office as the men for his money.

36713. You are clear the butty, whoever he is, who contracts, does that?—He can set on his own doggy, as we call him.

36714. And his own fireman?—Yes; there is very little pay for that.

36715. And in some cases they buy their own timber—I mean the contractor does?—Yes, in some instances they do, and in others they do not; because we have two kinds of butty systems, one is what they call a royalty system, where a man goes to the office and takes to a certain area of coal, say an acre of it, and he gets the coal and pays so much per ton royalty into the office, and he takes all risk of buying timber and everything else.

36716. So that the contractor himself purchases his own timber and pays for his own timber?—I do not know you would take him to be a contractor for that. I meant the last kind of buttyship.

36717. The old notion of a butty colliery in Staffordshire was that he had either two or three men, according to the size of the pit, that he contracted to get the coal out, and did everything, paid for the timber and rails, and bought his own horses and everything. He was the employer and got it out for so much a ton. I want to put to you whether there is still the practice for the butty collier being responsible for the purchase of his own timber?—There is.

36718. While the obligation of the company is to find the timber, and see that the man has suitable and sufficient timber, still, with you, the butty collier has to find it?—Yes. But there are two kinds of butties—the one butty where the office (that is his lordship) finds all the timber and everything, apart from the horses. That butty gets his coal out at so much per ton. The other provides everything you name, but instead of getting so much per ton he gives the office so much per ton for getting it—so much royalty they call it. These men have saved sufficient money to start these little places, and they work on their own and take all responsibility.

36719. You suggest that in these very important thick seams there is not that supervision there ought to be under the Act?—There is not.

36720. When you were quoting the figures of Mr. Johnstone were you comparing the same figures that Mr. Johnstone used for purely the Black Country?—Yes. That was a statement made by Mr. Johnstone, our Chief Government Inspector of the Staffordshire District, and he regretted to have to call attention to the fact that our death-rate from the falls in the Black Country was 2·34 and the general rate in the country was ·78.

36721. You deal with inspectors over a particular area, and when you say "my district" you mean this particular Black Country?—Yes.

36722. Would you call Sandwell the Black Country?—It is connected with all our undertakings.

36723. Do you call Hamstead the Black Country?—No.

36724. Pelsall and Blakely?—No, nor Cannock Chase. The area I speak of is an area which employs a little over 7,000 men, and that is in the Black Country proper.

36725. The figures are quoted for that particular area?—Yes.

36726. And that is covered by an arrangement under the Workmen's Compensation Act?—Yes.

36727. On those figures, apart from the rest of Staffordshire, you are able to form an idea of the number of accidents?—Yes; for your information, I may say that up to the end of the year ending 30th June, 1907, in a district covering a little over 7,000 men, there were 1,680 accidents took place. Unfortunately, in Staffordshire as a whole, the number of accidents is much higher than one feels happy under.

36728. I suppose we may take it there is no other coalfield in the Kingdom like the distinguished Black Country seam of 10 yards thick—30 ft. of coal—worked in sections?—That is so.

36729. Do the colliers in the seam do their own timbering?—Yes.

36730. It would be part of the contract?—Yes.

36731. It would be difficult to go and get the coal unless he did set timber?—It would be.

36732. You could not apply the system they have in Durham of setting timber?—I do not know. But in a thick coal opening—it would be rather difficult to make you understand it—it is far better for the man to commence and finish it because he understands it better than a stranger coming in. These are special men, what we call pickers-in. I am afraid we are a little difficult in that respect, and that brings about more accidents. Sufficient attention is not given to the highly skilled men, and it is absolutely necessary there should be very highly skilled men employed.

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36733. So much depends upon the timbering ?—Yes.

36734. Generally the colliers do their own timbering ?—They do.

36735. The expression of your opinion with reference to this question of the examination by the workmen is not from any experience you have had of examinations made ?—No.

36736. You have not had any ?—I have never seen it put into operation.

36737. Nor is it a question much discussed amongst the men ?—We have chatted it over, but we have never felt ourselves sufficiently strong enough to take on the position, there is too much risk in it.

36738. If the law had been a little wider, and you could have appointed two pitmen from Cannock Chase or Pelsall, would there have been the same objection ?—There would certainly not have been on the part of the men, but there would be on the part of the butty.

36739. You have no checkweighers there ?—No.

36740. The Rule is a dead letter in your district ?—Yes.

36741. The men work by day wage ?—Principally.

36742. So that when it is suggested that if they worked by day wage that would minimise accidents it does not do so in your case ?—No.

36743. They do not work by ton ?—At very few places indeed ; it is more stint work. The way they work is by number.

36744. It is day work after all ?—Yes.

36745. That is piece work ?—Yes.

36746. It is hardly working day wage ?—I should like to explain our standard rate of wages is 5s. 4d. for fillers, we get that 5s. 4d. for loading say 32 tubs a day, and 32 is a day's stint, and no more. However difficult the place is we are expected to send that number out, even if we are kept overtime—and they give us 5s. 4d. for it.

36747. The old butty system was always carried on with a stint ?—Yes.

36748. (*Mr. Ratcliffe Ellis.*) Mr. Johnstone is the inspector in your district now ?—Yes.

36749. You give him a very good character ?—Yes.

36750. He is a very excellent man ?—Yes.

36751. For all the requirements of an inspector ?—Yes.

36752. If he was in two or three pieces, so to speak ?—If he could give us more time.

36753-4. With regard to the general manager, you said he was second to none ?—There are good general managers, I will say that, only the number of pits they have to manage is too many.

36755. He is a good man ?—Yes.

36756. The charter master is a man who has worked as a collier generally ?—In most circumstances.

36757. He is a practical working miner ?—Yes.

36758. Then the men you give a good character to, Mr. Johnstone and the general manager, are not men who have worked at the face ?—No. Well, I do not know with regard to the general manager ; he would have some experience to obtain his first-class certificate.

36759. He has not worked as a miner at the face, nor has Mr. Johnstone ?—Mr. Johnstone hails from Scotland.

36760. A colliery engineer and mining manager is his description ?—Yes.

36761. You want to exclude men like Mr. Johnstone and this excellent general manager from being appointed as inspectors ?—No.

36762. And the charter master is the man who is to be eligible ?—No, I object to that.

36763. I think that is the conclusion I have come to from your evidence. You give the highest possible character to Mr. Johnstone as an inspector for everything an inspector has to do, and the general manager whose name you gave is also excellent for his job. If these working-men inspectors are to be appointed only from men who have worked at the face as miners, you will exclude Mr. Johnstone and the general manager you mentioned, and you would only have to select from men like the charter master ?—No.

36764. You think that would be undesirable ?—Yes.

36765. If I am right in what I am saying, that would not be a method conducive to safety ?—Mr. Johnstone is our District Inspector of Mines ; it never entered into my mind to suggest doing away with his excellent services.

36766. Is he a competent man ?—Yes. I suggested—I do not know whether I have conveyed a wrong impression in answering the question—that there should be additional inspectors.

36767. I want to see whether you would be satisfied if they could be drawn from the same class as Mr. Johnstone belongs to ?—I think from the working miners is much preferable, if there are going to be additional inspectors.

36768. You mentioned three classes of men : There is Mr. Johnstone, an inspector of mines, excellent for the purpose ; there is another gentleman you named, who is excellent as a general manager ; but neither of those have been working miners. The charter master you do not approve of, who has been a practical working miner. If, as has been suggested here, these sub-inspectors are to be selected from the working miners, the class you select from excludes Mr. Johnstone and the other gentleman, and includes the charter master ?—You may construe it to mean that, but I do not mean that. My suggestion is not to exclude the manager as an inspector of mines.

36769. You would be satisfied if these additional inspectors were all like the present Inspectors of Mines, all equally qualified ?—Yes, all qualified men.

36770. If all equally qualified, that would satisfy you. You would not mind what class they were drawn from, if qualified ?—Preferably from the miners.

36771. I want to know why. You say preferably from the working miners ?—I should exclude the charter master.

36772. He is a practical working miner ?—Not always.

36773. I understood generally he is a man who has worked at the face and saved money ?—In several instances they are working miners, or have been at least for a few years.

36774. What do you think these inspectors should do when they go to inspect the pit ?—Give special attention to the openings. A man trained in a thin seam would be absolutely useless to act as an inspector in a thick coal seam. The only man to have a thorough knowledge of it is a man of practical experience, and that is the most dangerous part of our work.

36775. Mr. Johnstone is a thoroughly satisfactory man, and a man of the class from which the inspectors appointed by the Government are drawn. Do you propose that they should do more than see that the Coal Mines Regulations Act is carried out ?—He is His Majesty's Inspector of Mines, but additional inspectors would certainly give more time for the general supervision of the pits.

36776. Are they to do more, in your view ? Is your view that they should do more than see that the management is carrying out the Coal Mines Regulations Act ?—I do not see anything more. With regard to timbering, the Act is fairly stringent in that respect, if they carry it out.

36777. They have to see that the Coal Mines Act is carried out ?—That is the inspector's duty.

36778. You do not contemplate that they should make any suggestions ?—If they can make any suggestions for improvement, by all means let them do it.

36779. Is your idea that they should make suggestions ?—Yes, which will increase safety.

36780-3. The man who makes suggestions to the manager would have to be as well qualified a man as the manager ?—Yes, certainly.

36784-5. With regard to the percentage of accidents you have mentioned in your district, I do not know whether you have satisfied yourself that percentage was for all accidents ?—May I read the statement made by Mr. Johnstone as Chief Inspector of Mines at a meeting last night : "Taking the whole of Britain, the death-rate from falls for 1906 was ·78 per thousand of persons employed. For the Staffordshire inspection district it was 1·01 per thousand—more than a third above the average for the whole country. For South Staffordshire the figures were 1·14. North Staffordshire came out better than South Staffordshire in this matter. For the Black Country the figures were 2·342 deaths per thousand persons employed —equivalent to three times the average for the whole country."

36786. That is some speech he has been giving ?—Yes.

36787. Does he give any reason for it ?—Mr. Johnstone only expresses regret at the serious rate.

36788. Does he give any reason why ?—No. He thought that there would be a decided improvement in the future.

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36789. (*Dr. Haldane.*) Does not he attribute it to the thick coal workings ?—Yes.

36790. (*Mr. Ratcliffe Ellis.*) He attributes it to the different physical conditions in this district from other districts in the Kingdom ?—He is bound to when he has seen the thick coal workings.

36791. It is much more dangerous ?—Yes.

36792. It is not fair to compare the death-rate from falls of roof in your district with the rest of the Kingdom ?—When there is such a difference ? It is fair to quote the figures.

36793-4. There are conditions in connection with working which are more dangerous ?—Yes. We are not subject to the striking explosions which take place in other parts of the British coalfield. This is simply falls of roof and sides.

36795. (*Mr. Smillie.*) What proportion of the miners in the Black Country will be presently under the butty system ? I think you referred to Lord Dudley's ?—I could not give you the correct figures, but I should think about one-fourth or one-fifth.

36796. One-fourth or one-fifth ?—Yes. I think that is near enough. I have not gone to the trouble of getting the figures out.

36797. These men were largely paid day's wage for stint work ?—You may term it stint work ; they always work stint work. What we call the brushers and blowers and fillers are allowed so many tubs for the day's work—32 for the day's work, and so much a day for that.

36798. Although they are not paid by the ton as men are generally, there is still a certain amount which they must produce ?—That is so.

36799. The pressure is quite as much on them as where men are paid by the ton ?—Yes, or more.

36800. The butty man will make sure that there is some person in charge to see that these men do their work ?—That is so.

36801. That does not prove that if miners were paid day's wage instead of by the ton, or stint work, that their employment would not be safer than it is now ? I mean, do you think pressure, either by having stint, or a certain amount put out, or paid by the ton, makes men run more risk than they otherwise would ?—I do, and it increases the number of accidents, undoubtedly, from my experience.

36802. Day's wage men, such as roadsmen and firemen, are paid by the shift ?—Yes.

36803. There is not always the rush on them that there is on men working at the coal face, or ripping ?—No.

36804. You gave Mr. Johnstone a very high character as a mines inspector. You have no fault to find with him ?—No, the only thing is, he cannot give sufficient time to the Black Country.

36805. You do not know whether he has or has not been a practical working miner ? You are not aware of that yourself ?—No.

36806. I suppose you are aware that he has been a colliery manager ?—No, I have never known him till this last few months, till he came into our district, but he has left no stone unturned in fishing out all the information he can with regard to our dangerous thick coal seam.

36807. Mr. Johnstone, as far as you are aware, has high qualifications, and is desirous of doing right, but is it your opinion that it would have added to his usefulness if he had had his present qualifications with the addition of a few years' practical experience at the coal ?—Yes.

36808. That is really what we mean ?—That is what we are suffering from.

36809. No fault is found generally with the present mines inspectors in the country ?—No.

36810. The feeling amongst your men is that if they had an additional qualification, having had practical experience would improve—— ?—Improve and reduce the vast number of accidents. I am certain of that.

36811. Do you think a practical miner, a man who had a long practical experience in all classes of mining work, face work and other work, and also scientific attainments and education, would be the best class of man for an inspector ?—I do, especially in the thick coal. If you put a thin coal man into a thick coal pit he is absolutely useless ; he knows nothing at all about it.

36812. Sometimes a man who has had his whole experience in a thick coal seam would not be as useful in a thin coal seam ?—A thick coal man can work in any coal seam in the country, because he has the knowledge of cutting and ripping and holing the same as a thin coal man would.

36813. The nature of the roof, whether a thick or a thin seam, will, to a very great extent, increase or lessen the number of accidents ?—Yes.

36814. Most of the roof is very treacherous, as miners call it ?—Yes.

36815. It does not give much warning ? There may be some accidents then if the roof is good ?—Yes. In a thick coal seam we have no strictly permanent roof. We have to keep climbing up till we have the coal out. Sometimes we cannot get the top section. That comes all together, the rock comes in hundreds and thousands of tons at a time and buries it.

36816. If you are correct in saying that the butty men at your collieries, where the butty system is still in force, appoint competent persons under this Act to be firemen, you are aware that that is not according to the Act of Parliament ?—I say it is in contravention of the Act, and has been for years.

36817. Is Mr. Johnstone aware of that ?—I should think he is, but I have not discussed it with him. His predecessor was aware of it. I do not now how you would construe it yourself. I considered it was a contravention, but no action has been taken in the matter.

36818. If the butty man has the appointment and the payment and the right to dismiss those men, he will have a considerable power over them ?—Yes, certainly, and that is where the evil comes in.

36819. They are not as likely to pay the same close attention to danger as they would if, instead of the butty man, the appointment was by the manager of the mine ?—I may say that the men look up to the butty man as their master ; they do not look upon the chief of the firm as their master. They look up to the butty man because the butty man pays their wages.

36820. He really is their master ?—Yes, he has the power to set them on, discharge them, and he pays them.

36821. Have you many unskilled persons going into the mines ? I mean those who have grown up unskilled ?—Yes.

36822. In the mines of Staffordshire ?—Yes. The butty system tends to that ; it tends to encourage them in preference to practical men.

36823. Cheap labour is one of the things they are anxious to have ?—Yes, and it is very dangerous in a thick coal pit.

36824. A large number of unskilled persons going into your specially dangerous seams is a danger to themselves ?—And to those around them.

36825. Do you know whether or not the high death rate from accidents is in any way due to the employment of unskilled persons ? Have you any figures with regard to that ? Is the proportion of persons injured or killed larger among unskilled workers ?—The proportion of deaths and permanent accidents is considerably greater under the butty system than under the ordinary system of working, and has been for a considerable number of years.

36826. That, in itself, is very important ?—Yes.

36827. (*Dr. Haldane.*) In the same seams ?—In the same seams, working under the same conditions.

36828. (*Mr. Smillie.*) That is very important. Can you give any information on the other question ? Have you given it sufficiently close study to enable you to say whether the proportion of accidents is greater with unskilled persons than with skilled miners ? In a general way you would say it must be so, but you do not know from figures ?—No, I have no direct evidence to prove that. From interviews with our men and constant meetings they are always attributing certain accidents to the introduction of unskilled labour. Men are put into positions who have had no practical experience, and they are put over those who have had experience.

36829. If I put it to you that there was more danger arising from an unskilled man driving a new Great Western engine to Carlisle than a skilled man, you would agree with me that that was so ?—Yes.

36830. But you have no statistics to prove that it is so ?—No.

36831. What class of unskilled labour is it that goes into the mines ? Are they agricultural labourers ?—No, practically all classes, more or less, from various industries, especially when wages are high.

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36832. There is a larger increase then than at other times ?—Yes.

36833. Do your boys, on leaving school and entering the mine, start at the coal face or on day work ?—They all start on day work. The boys commence first of all minding doors and different things like that. They do not get to the coal face sometimes till they are 25 or 26.

36834. You have no lads allowed to work at the coal face ?—No.

36835. Do you think it would be an advantage, so far as safety is concerned, to give lads likely to go into the mines to work some knowledge of mine gas ?—I do.

36836. And the dangers of mining, and the Special Rules and the Coal Mines Regulation Act, before they go in ?—Yes.

36837. That might be done at school ?—Yes.

36838. Nothing of that kind is done so far as you know at the present time ?—No.

36839. You think it would be an advantage ?—It would be, but we have no mining village; we are interwoven with other industries. We have not a village what I call a mining village. There is none of that taught. We have mining classes for young men from 18 to 30.

36840. For grown-up persons ?—Yes, and very useful they are.

36841. What class of houses have your men ? Do they live usually in the employers' houses or are they owned by private individuals ?—They are owned by private individuals, particularly.

36842. You have not a very large proportion of workmen living in houses belonging to the colliery ?—No; there may be a few, but very few indeed.

36843. Generally the houses are good, roomy houses ?—Yes, nice cottages. It is not like being in Scotland. You would not find a row of houses for colliers in our Black Country. They are mixed with various kinds of tradespeople.

36844. Have you given any consideration to the question of washing at the collieries ? Would it be an advantage if the miners could have an opportunity for washing at the collieries and leaving their pit clothes there and going home in their ordinary clothes ?—I do not think it is necessary in our district.

36845. There is plenty of convenience at home for washing ?—Yes, and they do not have to walk great distances; most live fairly close to the pit.

36846. You have not any great number who travel by train or who travel a considerable distance ?—No.

36847. Have you very much wet work ?—Yes, there is a lot of wet work in the Black Country.

36848. Where the men are working wet and come out of the pit drenched with water is there any arrangement for changing their clothes ?—No; they have to go home.

36849. Is it not a very considerable disadvantage to them, especially in cold weather, to walk a mile or so in that condition ?—Yes, it is; but it has been in existence ever since I can remember. I have had to do it for years myself.

36850. The miners get so well used to it that they do not take any notice of it ?—No.

36851. (*Mr. Enoch Edwards.*) I should like to be clear about one statement you have made here. When Mr. Smillie asked you what proportion of these men were working under butties, you said one-fourth. Do you mean one-fourth of South Staffordshire or the Black Country itself ?—Not South Staffordshire.

36852. You said there are about 7,000 in the Black Country ?—I am talking about the men who are covered with the compensation scheme. We cover 7,000 or a little over. The butty system prevails in one-fourth of the whole.

36853. There are less than 2,000 men and boys employed by butties ?—Yes; it would be running on to 2,000. I am not sure about the figures. I have not troubled to bring the exact figures.

36854. (*Chairman.*) Is the number going up or down ?—It varies. Some months there is an increase and others a decrease. It ebbs and flows. There may be 100 men at this pit in January, and in December it may be reduced to 75.

36855. It applies to certain pits. How long will those pits continue to work under the butty system ? Are they leased under the butty system for a number of years ?—No.

36856. Or till the amount of coal has been got out ?—Till the seams have been extracted.

36857. It will go on till the seams have been extracted ?—Yes.

36858. How long do you suppose it will go on ? Will there be fresh butty leases made ?—They transfer them. As they work one place out they go to another.

(*Mr. Enoch Edwards.*) A particular firm prefers to work their coal by contract butties. That is what I take it.

36859. (*Chairman.*) A particular firm does it ?—Yes. I cannot see that it is any advantage to the firm. I think it is a loss myself. It is a dear-beloved system they have had, and they stick to it.

36860. If things go on as they have gone on, the butty system will be very much in the same position in 10 years time as it is now. There will not be much decrease ?—No.

36861. Nor, perhaps, for the next 20 years. Do you think it will last 20 years ?—I do. They keep working the different seams. Most of our pits are broken mines. One butty will work in its maiden state, and 20 years after another butty in its broken state.

36862. You do not see a prospect of it coming to an end until 20 years or more ?—No.

36863. Or it being seriously diminished ?—No.

36864. (*Dr. Haldane.*) Is not the broken coal getting exhausted—that is, the thick coal ?—No.

36865. Is not the broken coal near the surface ?—No. It will not be exhausted for a great number of years.

36866. (*Mr. Ratcliffe Ellis.*) In the case where the owner of the mine and the owner of the plant chooses to let both mines and plant to a lessee, reserving a royalty by way of rent calculated upon the quantity of mineral gotten, do you see any objection to that ?—The only objection is that it introduces very much unskilled labour, because this arises from colliers as well. They save a few pounds and they take these places on, and are the very people where most accidents take place.

36867. That is no fault of the system. Usually a man who works a colliery takes a lease from the mine or the colliery owner, and spends his money in sinking the pit and establishing the plant, and makes his profit. If a man is in that position and is tired of working it himself, and wants to let it to somebody else, he finds somebody else to work it, and they give him, by way of rent, a certain sum calculated on the coal he gets, to remunerate the owner for the royalty and interest on the plant and depreciation. I understand that is one part of the butty system.

36868. (*Chairman.*) You include that system of working under the butty system ?—Yes.

36869. (*Mr. Ratcliffe Ellis.*) Do you see any objection to that ? A lessee who is working this mine is the owner, and is bound to carry out the regulations of the Coal Mines Act. If he does not, he ought to be made to do it. The system does not seem to me to me prejudicial ?—I see no objection to the system you have quoted; it does obtain in various parts. More attention is wanted with regard to the supervision of the mines but that does not alter the principle.

36870. The second system is this: Where the man who is working, and is the responsible man, says to some person, "You take this district and get the coal, and find your timber, or do not find your timber, either give me so much and make what profit you can, or I will give you so much and take the balance for my profit ?"—That is the butty system.

36871. The objection to that is the person who is the contractor is made responsible for the mine by the arrangement, and does not take his responsibility sufficiently seriously, because he is too anxious to get coal ?—That is so.

36872. Why should not he be made to do that ?—It is brought about through the want of periodical inspection by somebody in authority.

36873. What is wanted is a greater supervision of somebody to see that the Coal Mines Regulation Act is carried out ?—That is so. If you do that you will reduce accidents.

36874. It is not the system which is wrong so much ?

(*Mr. Wm. Abraham.*) The system itself is rotten altogether.

(*Witness.*) Yes.

36875. (*Dr. Haldane.*) You say, I think, that most of the mines are shallow and pretty cool ?—Yes.

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Mr. T. Mansell.

23 Jan., 1906.

36876. There are very deep mines also in your district?—Only two, Hamstead and Sandwell. We are not including those on the butty system.

36877. I am not thinking of the butty system. I was thinking of it in connection with the worm disease. There are deep mines?—Yes. Sandwell and Hamstead are the only two.

36878. There are more going down to the thick coal where it is deep beyond the boundary fault?—Yes.

36879. In these mines, at any rate, there is a temperature which might be dangerous so far as the worm disease is concerned?—Yes

36880. Have you had much complaint about bad ventilation in your district?—We suffer constantly from that.

36881. Black damp?—Yes. That is the principal gas found in our mines. That is due to bad ventilation in most instances.

36882. There is a great deal of black damp?—Yes.

36883. And a great deal of danger from heating of the coal?—Yes.

36884. And poisoning?—Gob fires.

36885. Gob stink?—Yes.

36886. Great attention is required to be given to the ventilation in the interests of safety?—Yes.

36887. Is it a common thing for men to be working in air which will scarcely keep a light burning in it?—I have worked in it hundreds of hours myself—black damp. There are very few of our small pits that are free from it any day of the year.

36888. Do you think it is necessary to have a standard of ventilation to prevent such things?—It is rather difficult; if you raise the ventilation you are going to create gob fires on account of the broken state of the mine. You cannot get ventilation too high, because it creates gob fires.

36889. I think that is a matter that is very doubtful. It is the practice in your district to stop the ventilation on Sundays often?—No, where there are gob fires.

36890. With the idea of stopping gob fires?—Yes.

36891. Is there any evidence that it did stop the gob fires, or do any good whatever?—The experience I have had is it has damped it down. It has allowed us to get into the workings again.

36892. You stop the ventilation?—For three days or a week.

36893. Are you sure it was not due to other causes? You are aware the amount of gas and smoke in the mine depends largely on changes in the barometer?—Yes.

36894. If you stop a day or two the barometer may have gone the other way?—Yes.

36895. And the whole place be clear?—The idea we have in damping places is to introduce black damp to kill the fire.

36896. To prevent any air getting at it?—Yes.

36897. Black damp is caused by the chemical change in the coal itself. You are aware a good deal of trouble arises from men working in black damp?—Yes, and that increases the danger, especially in the thick coal opening. They have no chance to test the roof 5 or 6 yards high, where the damp is prevalent, to see whether it is safe or not. They run a risk in filling up the coal that is down. Many accidents are caused like that.

36898. Why cannot they get at the roof—because of the damp?—Perhaps you cannot understand it.

36899. I know them?—Our place is as big as this 10 yards square and 10 yards high. Suppose our section was 5 yards high. If you have black damp all the way round it is impossible to take your light to test this coal.

36900. The black damp is at the roof?—Yes.

36901. And not on the floor when it is full?—When the place is full of black damp.

36902. You cannot get in at all with a light?—No, very often we cannot. In the more shallow mines I have had experience of having to run out with my clothes under my arm, and also my comrades. The black damp has driven us out quick through a change in the atmosphere.

36903. Through a change in the barometric pressure?—Yes.

36904. Although naked lights are used in all the mines in your district there is still a great need for looking after the ventilation?—Yes; it is a very difficult thing to do.

36905. There is no trouble from fire-damp, but a great deal of trouble from black damp and gob stinks?—Yes. That is owing to the broken state of the mines.

36906. (*Mr. Ratcliffe Ellis.*) Is not the difficulty about the butty system that the places are so small, they are very little collieries, very small places indeed, and placed in the hands of the men who have risen from the ranks and have not capital to carry the thing out?—Yes. They vary in area and the coal they get.

36907. The practical working miner does not shine as a manager?—No.

36908. (*Chairman.*) There are these two systems of butty working. What proportion are worked under the first system, which seems not to be so dangerous as the second system, shall we say?—I have hardly got the question you have submitted.

36909. Mr. Ellis has put it to you that there are two ways of working under the butty system?—Yes.

36910. I do not think I need repeat what he said upon that point?—No.

36911. What proportion of mines in the Black Country worked under the butty system are worked under one system, and what proportion are worked under the other, under the system that is more dangerous, or the system which is comparatively speaking less dangerous?—I should think it would be quite eight-tenths.

36912. Under the second system?—Under the butty system.

36913. Under the real butty system?—Yes.

36914. The unmitigated butty system, we may call it?—Yes.

36915. About that?—I am not certain about the figures; I simply give that from my present knowledge of the area.

36916. It is to the best of your knowledge and belief?—Yes.

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FIFTY-FIRST DAY.

Wednesday, 5th February, 1908.

PRESENT:

H. H. S. CUNYNGHAME, Esq., C.B. (*in the Chair*).

JOHN SCOTT HALDANE, Esq., F.R.S.
ENOCH EDWARDS, Esq., M.P.
ROBERT SMILLIE, Esq.
S. W. HARRIS, Esq. (*Secretary*).

Mr. LEVI LOVETT, called and examined.

Mr. L. Lovett.

5 Feb., 1908.

36917. (*Mr. Cunynghame.*) You are deputed by the Leicestershire Miners' Association to come here and give evidence?—Yes.

36918. I will take you shortly, because we have heard at very great length a number of the points already on which you are going to give evidence. You think that the inspecting staff should be enlarged so that there should be two thorough examinations made each year instead of one, which is the average at present?—Yes, at least two.

36919. I suppose you would concede that it would be impossible for the State to undertake such an inspection of mines as to guarantee them to be completely safe, in other words, to take the question of safety out of the hands of the management?—I do not think they could possibly do it.

36920. Still, you want more inspection than exists at the present?—Yes.

36921. What would you desire as to inspection by men under Rule 38?—I think they should be appointed by the Government and paid by the Government.

36922. That means you would have some practical men as Government inspectors?—That is so.

36923 I suppose your practical men would not be inspectors capable of doing the very most difficult task, such as advising on the whole ventilation of the mine?—No, but practical men so far as concerns examining the roof and side places.

36924. That would be with a limited function?—Yes.

36925. I suppose if they were appointed they could not aspire to be inspectors of the higher orders, unless they were able to pass an engineering examination?—Of course, if they were able to pass such an examination they would be able to aspire to be inspectors.

36926. I think you have something to say about inspection under Rule 4?—Yes. When there are two shifts working consecutively without the men leaving the shift there is no inspection, and I think the inspection ought to be made between the shifts.

36927. What do you say as to the fining of men?—In our district it is found to work very well indeed. Unless there has been a gross breach of the rules they fine a man, and that is with the man's consent in writing, and in some places they post his name up in a conspicuous place about the colliery to show he has been fined. We think that much better than taking him before a magistrate for small matters.

36928. You would not allow that to be done in the grosser or grave cases?—Quite so.

36929. It is only done in the trivial cases?—Yes, in the trivial cases.

36930. What are your reasons for thinking a fine is best?—We think it is quite as effective to fine him; besides, we do not care to take him before a magistrate and get him convicted if it is a very trivial offence.

36931. You think the disgrace, so to speak, of being brought before the magistrate is more than the character of the case warrants?—Yes.

36932. And there is also the loss of time in getting the conviction?—Yes; but it is not the loss of time, it is simply the question of the man being brought before the magistrate.

36933. You think the punishment rather exceeds the crime in that respect?—Yes.

36934. You are of opinion that discipline can be maintained by fines as well as by prosecution?—So far as my experience goes, I think it is quite as effective for small offences as taking him before the magistrate. I may say these matters have been brought before the executive of our Association, and they quite agree with what I am saying here.

36935. I think you have something to say about Special Rules?—Under the Special Rules as framed now, I do not think the men or the managers have a fair chance. We had some experience with reference to that some years ago when they were framed. The managers submitted them to the Home Secretary and there is a deal of trouble to get them to alter them sometimes.

36936. What rules are you referring to?—The rules which belong to Mr. Stokes' district (No. 8), Leicestershire, Warwickshire, Nottingham and Derby.

36937. Were they rules about timbering or a general set of rules?—A general set. They are the same in those four counties.

36938. They are a sort of revision of the Special Rules affecting the county?—I think it was a general alteration of the Special Rules.

36939. All the way through?—Yes.

36940. A sort of consolidation and revision of them all?—Yes.

36941. Did not the men get an opportunity of making their views known before those Special Rules were finally adopted?—Yes, but the opportunity was so small. If it had been left to the men themselves, there would be scarcely any objection raised. They have to be posted up so long and unless the check-weighman had an opportunity of looking at those rules there would probably not be sufficient notice taken of them.

36942. Still they were posted up for some time?—Yes.

36943. Could he not see them and discuss them and make representations and call a meeting if necessary?—It is very rarely the men call meetings unless they are fairly well organised, and the check-weighman going to look at those rules and reporting to the men would be exceeding his duties as check-weigher.

36944. What system do you then suggest?—I suggest that a Board should be formed in different districts consisting of inspectors, managers and workmen, and workmen's representatives.

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Mr. L. Lovett.
5 Feb., 1908.

36945. What would you propose to do supposing there was some rule that it was proposed to bring into force for the whole of Great Britain? You could not deal with it locally, very well, because the rule would be different in every district?—I think rules brought in for the whole of Great Britain would be wrong, so far as Special Rules are concerned.

36946. Let me take an instance of some rules brought in applicable for the whole of Great Britain, and I think you will agree rightly so; I mean the rules for electricity in mines. A large code consisting of more than 50 articles was brought in about three years ago for the whole of England, and is quite uniform. Do you not think it would be a very good thing that those electricity rules should be applicable to all mines?—Those are different to the Special Rules. I do not think Special Rules should be framed the same all the way through for Great Britain. I think there are some districts where they should be different.

36947. Still, there should be some rules of a desirable character framed which might be uniform throughout Great Britain?—Yes.

36948. Is it not a fact, if you look at your own code of Special Rules, that nine-tenths are applicable really to every mine in the county?—It may be so, but I can only speak for the four counties I have named, Leicestershire, Warwickshire, Nottingham and Derby.

36949. They are applicable to all those counties?—Yes.

36950. If you extended them to Yorkshire and perhaps to Durham, nine-tenths of the rules would be applicable to Yorkshire and Durham, would they not?—Well, I could not answer as to that.

36951. Let me take one perfectly at random: "The under-manager or some other competent person shall at least once in every week measure the quantity of air in each split and enter it in a book to be kept for the purpose in the mine." That is a rule that might be applied to every mine in the kingdom with advantage, might it not?—Yes, that one might.

36952. I will not go through them all. I know a great deal about these rules, and my conviction is that if I put my finger upon any other one, perfectly at random, you would answer the same, would you not?—No; I do not think you should make Special Rules for the whole of Great Britain

36953. Is it not a fact that these rules which would apply to Leicestershire alone and not be applicable to some other district are exceedingly few?—If they make the rules and give some latitude to the men and management, it might be so.

36954. Well, let me take Rule 47: "Every person about to fire a shot shall, before firing, see that all other persons are out of reach of danger from the probable effects of such shot"; surely that is applicable to the whole kingdom?—Yes.

36955. Now will you pick out for me from the whole of your district (No. 8) any rule which is only applicable to Leicestershire, and not applicable elsewhere?—I do not know that I can for the moment. I was thinking about the Board being formed and not about the rules being framed; and I should not object so long as there are some practical men on the Board to draw them up.

36956. The drawing up of the Electricity Rules was founded on the labours of a committee on which the working men had representatives?—Quite so.

36957. You think the working men should be consulted in some way as to these rules, and have their full say before the rules are brought into operation?—Yes.

36958. (*Dr. Haldane.*) Before they are settled?—Yes, before the form of them is settled and they are brought into operation.

36959. Do you not mean before they are drawn up?—Yes, I mean in the drawing up of the rules.

36960. (*Mr. Cunynghame.*) How can it be possibly shown to anyone before it is drawn up?—I think the men should know when it was being drawn up.

36961. How can you have the working men come in to discuss it, even before a scheme is drawn up?—They might discuss the scheme.

36962. There must be a scheme proposed by someone before they can discuss it?—Quite so.

36963. (*Dr. Haldane.*) You rather object to the rules being drawn and posted up for any objections to be made to them before the workmen are consulted in any way. You say they should be consulted at an earlier stage?—Yes.

36964. The important case is, where rules are proposed by the Home Office—they must in such a case be framed by the Home Office before suggested?—Yes.

36965. And when sent down means must be taken to make them known?—Yes.

36966. One of which would be, at all events, by posting them at the pit?—Yes.

36967. Your great point is that the workmen should have in each district a thorough opportunity of making their feelings and opinions with regard to these rules thoroughly known?—That is so.

36968. (*Mr. Cunynghame.*) Now as to accidents, what do you say with regard to systematic timbering?—With regard to systematic timbering I think the stallman should be allowed to set advanced timber in the stall. In our district we had some difficulty not long since. You will find I am following Mr. Stokes somewhat, the Government Inspector of No. 8 district. His duties lead him into our district and with all due respect to Mr. Stokes, we have sometimes to come into conflict with him as Government Inspector. With regard to systematic timbering, so far as I am informed, Mr. Stokes is even going beyond that in the stalls. In some of our seams there is a system of timbering, called a leading prop, or advanced prop, or safety prop, that has been set in some of the seams—what is called the old main seam—for 30 years; but in the lower seam it is not at all required in many places. Now we have had great difficulty, and Mr. Stokes has been trying to make the men set this prop, whether required or not as a system. We have very nearly had a strike about it. We met the owners at Leicester and they agreed not to enforce it unless where necessary. Just recently we have had a dispute at one colliery, and there the matter came forward very acutely.

36969. Your point is that there has been a tendency (I will not say by whom) to insist upon what I suppose one would call the pedantic setting of props, whether they are required or not?—That is so.

36970. You say they only ought to be set where required?—That is so, I think, under Special Rule 70.

36971. This is the rule: "Stallman in each stall shall build efficient packs and set a sufficient quantity of props, bars or timber for safely supporting the roof and sides in their working places, and shall remove and renew the same when necessary"?—Sometimes a man thinks it is unnecessary.

36972. Apparently Mr. Stokes, out of anxiety for the safety of the men (for it must be that) is going rather further than you think he ought to go?—That is so.

36973. What is the prescribed distance at the present time?—Not more than 6 ft. under our agreement (*Producing.*)

36974. Under your agreement would that occasionally involve the setting of the props at a greater distance than 6 ft.?—No, a lesser distance.

36975. You mean to obey the 6 ft. rule, notwithstanding that agreement?—Yes.

36976. Supposing it was unnecessary to have props at a nearer distance at some particular place, than 12 ft., does that agreement mean you are not to set them nearer than 6 ft.?—Yes, not to go beyond 6 ft.

36977. You are to obey the 6 ft. rule, notwithstanding the agreement?—Yes.

36978. You say there has been a tendency to want you to timber systematically, at a great deal less than 6 ft., whether necessary or not?—Yes It is what the men themselves call a man-trap, because it is likely to be knocked down and injure a man.

36979. At all events the error, if it is an error, is rather due to an excess of care for your safety than a want of care for safety on the part of the inspector?—Yes; but the men think if it is set when it is not needed for the roof it is a source of danger.

36980. At all events it is done out of an excess of care for your safety by Mr. Stokes?—That is all.

36981. Now about the explosives in the Coal Mines Order of 1896. Will you call attention to the portion which you think wants modification?—So far as I am concerned, I do not know that it wants any modification in our district. In our district, on May 12th, 1897, we came before the then Home Secretary, Sir Matthew White

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Ridley, when the Order was first made, and we asked to ge an exemption for our county, if possible, or a modification.

36982. Of what part did you want a modification?—Of that part where it is said in the Order: "Where inflammable gas has been found in a mine." When the Order was framed it was said: "When such inflammable gas was found in such quantity as to be indicative of danger." The words "in such quantity" when it first came out were not there. The first point we made was this, that no fatal accident had resulted from using blasting powder in this district, during the last 25 years, nor previously to our knowledge. That was on May 12th, 1897—it is more than 10 years since then, and no fatal accident has occurred since that time.

36983. What do you want done that is not done?—Mr. Stokes wants and says that those words ought not to be in that Order and they ought to be taken out.

36984. Do you mean the words: "In such quantity as to be indicative of danger"?—Yes; we want those words retained in the Order.

36985. He says it ought to be "Wherever gas has been found, whether in such quantity as to be indicative of danger or not"?—Yes.

36986. You think those words "as to be indicative of danger" ought to remain in the Order?—Yes. The Home Secretary indicated that he was disposed to modify the Order.

36987. Well, you seem in that instance to have been consulted, at all events?—Quite so.

36988. (*Mr. Smillie.*) Because they protested?—Yes, we protested. The Home Secretary intimated that he was disposed to modify the Order and extend the date of application, and he also stated that he would be pleased to receive suggested modifications of the Order, but that a total exemption for any district could not be entertained. Upon his making that suggestion that he would be pleased to receive any modifications, Mr. Maclaren, now Sir Charles Maclaren, suggested these words for us, and they were introduced into the Order.

36989. (*Mr. Cunynghame.*) Those are the words also that exist in the main Act?—Now.

36990. They did at that time exist in the Coal Mines Act, but not in the Order?—I could not say.

36991. At all events you think those words ought to remain?—We do. In our districts we have pits and seams which have been going for more than 100 years, and I do not know of any explosion of gas that has ever taken place in those seams. We have just one pit now, where they are working by lamps the whole of the pit; and there is part of another pit worked by lamps—but there is no trouble. If the managers find gas in the pit that is in any wise dangerous, lamps are introduced (although they pay 2d. per ton extra for lamps) and have been for many years now.

36992. I should like to put one point to you as a practical miner. It was suggested that if we put in the words "wherever gas has been found," and do not indicate the quantity at all, to some extent it might be but a thimbleful, then there is no mine in the country where you could say that gas has not been found, if you chose microscopically to look for it. Is that so or not?—I should think there is hardly any pit where you could not find gas at some time.

36993. If you went so far as that it would be said you might as well prescribe safety lamps and have done with the difficulty?—Yes, where gas was found. At most pits I think you would find a little gas, but not dangerous.

36994. Now as to safety lamps, do you consider the present Rule 8 enough at present?—I do.

36995. I suppose you would be in favour of a Government inspection and test of safety lamps to prevent any being used that are not safe. Would you have any objection to that?—I do not quite understand the question.

36996. Would you have any objection, or would you support the Government asking for a lamp testing station at which lamps used by miners should be tested to see they were safe?—I should have no objection to that. I think if lamps are used they should be as safe as they possibly could be.

36997. And you would approve the Government taking steps to test them?—Yes.

36998. (*Dr. Haldane.*) I think I am right in supposing there is very little trouble, either from explosive gas or black damp in your district?—Very little indeed.

36999. The mines are well ventilated and there is plenty of air as a rule?—Yes.

37000. Have you ever considered whether it would be a desirable thing to provide accommodation for washing and changing at the pithead for men after their work?—I have not.

37001. In your district is there fairly good accommodation at home for washing and changing?—Yes.

37002. The housing is good, you say, on the whole?—Yes, very good.

37003. On an average how many rooms would there be in a miner's house?—In most of the houses there are three rooms down, and three up.

37004. Six rooms?—Six rooms.

37005. That is plenty of accommodation?—Sufficient, I should think.

37006. So that there is no difficulty in a man getting a tub when he comes home from his work?—Not the least, if he requires it. In our district there are many of the men who get houses of their own, and there is a lot of freehold property, but there are very few colliery company's houses. The houses are being built of a very good class indeed, and the rents are from 4s. to 5s. and 5s. 6d. a week.

37007. Those houses are built by private persons?—Yes.

37008. Not by the company?—No.

37009 Do you mean it is possible to provide six rooms at a rent of 5s. a week?—Yes, they are doing it in some parts of the district. When you get into the urban district the rents are more; but in the rural districts 5s. and 5s. 6d. is the top price. There are plenty of houses with six rooms to be had at 5s.

37010. Are those prices inclusive of rates?—Yes, the landlord pays the rates.

37011. Are there bathrooms in many of the houses?—No; very few have bathrooms. There are three bedrooms and three rooms downstairs, and each room as a rule is separate from the others.

37012. (*Mr. Enoch Edwards.*) At what hour does your deputy make his examination?—I could not tell you, speaking straight off. The deputy makes an examination before the men go in.

37013. Does he examine the road and working-place and faces?—Yes.

37014. Did I understand you to say that was the only examination made?—No; there are other examinations made, but between shift and shift they are not to make an examination. If there are men working in the stall, say, at 12 o'clock, and another shift comes on at 12 o'clock, and the first men go away, they are not forced to make another examination.

37015. You do not suggest that the first examination is the only examination?—No; so far as the examinations are concerned, there are five or six every day.

37016. Then what did you mean by saying in answer to Mr. Cunynghame that that was the only examination?—I did not say that was the only examination.

37017. I thought you complained that it was the only examination?—No. One of the Special Rules says that those two or three shifts are to be reckoned as one. If they are not reckoned as one there is to be another examination made. If th re is no break, there is no other examination made. I think between the one set of men going out and another coming in there ought to be a separate examination.

37018. I certainly understood you to suggest that was the only examination made. If the shifts are continuous the fireman would be making his examination during the shifts?—Yes.

37019. Yours is not a gassy mine?—No.

37020. Do you use lamps at all the places?—There is only one, and that has just been put in. One pit has been using lamps for a good deal in one district, but that district is stopped now.

37021. Are you subject much to falls from roofs and sides?—No, not much—it is a strong stone roof in the upper seam.

37022. Do your workmen make any examinations at all under General Rule 38?—Not now.

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37023. Is that because they do not think it necessary ?—If I was to give my opinion, I should say it is because they were afraid to report years ago, before there were associations.

37024. What is the reason now ?—Well, it has not been attempted recently.

37025. I understand you to say that your men agree to the principle of fines at the office ?—Yes.

37026. Would you be surprised to learn that you are the only representative of the men who has said so ?—It does not matter whether I am surprised or not, it is what I have been told to say here, and what I believe in.

37027. What you believe in ?—Yes. I have not only a mandate to say that, but I believe in it too.

37028. You suggest first of all there is not the natural element of danger there from gas as in many other collieries ?—There is not.

37029. Your death rate from falls of roofs and sides is not so big as in other districts ?—I could not say that, but there are not many accidents occur in our district.

37030. Now coming to the question of fines for a small offence, what would you call a small offence ?—Well, I should not like to define a small offence. If a man was unramming a shot hole I should not consider that would be a small offence, but an offence with regard to shot-firing would be another matter.

37031. That would be a breach of the rules ?—Yes.

37032. You have many offences where a small fine would be imposed, but it is not a breach of the rules ?—Yes, for instance, smoking where you are using naked lights.

37033. Do they prohibit smoking where you use naked lights ?—Yes.

37034. You use naked lights and blast openly and they prohibit smoking ?—Yes.

37035. Do you know why that is done ?—To keep the pit safe.

37036. (*Mr. Smillie.*) What rule is that under ?—Under no rule. They post it up and it becomes law.

37037. (*Mr. Cunynghame.*) Why prohibit smoking ?

(*Dr. Haldane.*) Because of the danger of fire, I suppose.

(*Witness.*) One of the reasons, when we met the owners, for fining for smoking in the mines was this. We have never agreed for the fine to be put on, but they put up a notice that a man caught smoking would be fined so-and-so. They said so much about the lads smoking cigarettes on the roads, and that if they let the men smoke the lads would smoke.

37038. (*Mr. Enoch Edwards.*) You have had rather a serious fire or two at Leicester ?—We had one serious gob fire—not a gob fire, it was a fire in the main intake.

37039. It might arise out of a desire to prevent the men setting the timber on fire if they do not take matches in ?—The desire arose from this, if I remember rightly—I was at the meeting. The then secretary of the Owners' Association said that they could not detect the fire stink so well if cigarettes were smoked.

37040. They could not detect the gob stinks ?—No.

37041. That is an explanation, at any rate ?—Yes, whether it is a reason or not.

37042. Have you any agreed scale for fines ?—No.

37043. How do they proceed to fine a man. Who would fine him ?—The manager. There is a notice put up that after such a date a man will be fined for smoking. If the man is caught with a shovel, which is against Contract Rules, he is fined. They could not summon him, but they could dismiss him.

37044. Having a shovel instead of a fork ?—Yes.

37045. Those breaches of rules would be reported by somebody else to the manager ?—Yes.

37046. It would be possible for a man who was a neighbour to report a breach of rules, a man living near another man, when there was not much in the case at all ?—It might be so ; it is possible.

37047. He would agree to a fine where it would not result in a fine if he was taken before the Court ?—I could not say that.

37048. Your men have agreed that they prefer to be fined at the Court instead of at the colliery office ?—In cases. I will give you a case. Since the shot-firers were put on by the owners sometimes the men have to wait, whereas they ought not to. They ram and charge their own holes, and they have been firing shots for years until this Order came out. They sometimes fire a shot themselves, and they have been fined for that instead of being summoned.

37049. At the back of it the men and management realise that there is no danger from an explosion if you use all sorts of explosives when you use naked lights ?—Yes.

37050. The same stringency of rules in a fiery district has not the same force in your district ?—No.

37051. (*Mr. Smillie.*) I think you said having posted up a notice prohibiting smoking and stating that there will be a fine for so doing, that notice has all the power of an Act of Parliament ?—I do not know that they put a fine on to the notice. They prohibit smoking, and I think if it is so long posted up and no objection is raised to it it becomes law.

37052. Whether or not the Home Office has cognizance of it ?—I could not say. I am speaking off-hand.

37053. Will you tell us whether, if the manager at any time posts up Special Rules at that colliery without consulting the Home Office or the workers, and those rules stand for a certain time, they become law ?—I think so.

37054. Without consulting anybody outside ?—Yes, I think so.

(*Mr. Cunynghame.*) They could not, without serving them on the Home Office.

(*Mr. Smillie.*) I was astonished to hear it, but it evidently is so there.

(*Mr. Cunynghame.*) The owners can say "We will dismiss a man who does so-and-so," but not take him before the magistrates on those Special Rules.

(*Mr. Smillie.*) They can fine him.

(*Witness.*) That is what I mean.

(*Mr. Cunynghame.*) They can fine him certainly by law.

37055. (*Mr. Smillie.*) I recognise that the magistrate would not condemn a person under those rules, but it gives the management evidently power to fine a person. He might post up notices with regard to 150 different things of which a miner might be guilty which are not provided for in the Special Rules, and he would be justified in fining for any of those offences ?—I do not say "justified."

37056. He has power ?—We have objected to the fining for smoking.

37057. How have you succeeded in your objection ?—There are very few pits where it is finable. There are some pits where it is.

37058. If you believe in fining for offences against Special Rules why should you object to fines for other offences for which the employers post a notice ? If you are willing that fines between the manager and workmen should be legalised for breaches of those Special Rules which are for safety, why should you object to fines such as fines for smoking, when the management post up those ?—Because we think there is no occasion for fining for smoking when naked lights are used.

37059. Your protest has not borne any fruit ?—It has borne fruit.

37060. If a workman objected to be fined under this smoking notice, he is likely to be dismissed ?—Yes, that is so.

37061. Your Association then would be in a position, if it cared, to defend him ?—Yes. I know of no occasion yet where a man has been dismissed for smoking.

37062. You have known the men fined ?—Yes.

37063. Have you known them refuse to allow the fine to take place ?—Yes.

37064. And having it returned to them ?—Yes, but it has not been stopped.

37065. There has been a protest against it, consequently it is not strictly carried out where the protest is allowed ?—It is not strictly carried out.

37066. Your stallmen, underground workmen and boys generally, apart from the deputies and others, have about 20 Special Rules which they are expected to observe. They are the Special Rules from No. 63 to No. 82. The Special Rules apply to the stallmen, underground workmen and boys aside from those having special duties ?—Yes.

37067. Almost every one of those 20 rules would carry with it either a fine for breach or a prosecution ?—Yes.

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37068. Almost every one of those rules lays down some particular thing which a person is not to do or that he is to do ?—Yes.

37069. If he is guilty of a sin of commission or omission he would be liable to be either prosecuted or fined under almost every one of those rules. Can you tell us which of those rules you say a fine would be justifiable for ? They are all dealing with the safety of the individual himself, or the general safety of the men ?—I have never looked specially at those. Something occurs in the management of the pit and the men and the manager think it is sufficient to keep discipline in that pit to fix a fine. They ought to pay that fine if they think proper, instead of being summoned, unless there is a gross breach of the rules.

37070. A person is not entitled to go on the cage without the consent of the on-setter, and must come off the cage when the on-setter orders him to come off the cage. That is Special Rule 63 ?—Yes.

37071. If he refuses to come off the cage when the on-setter tells him, because there is an excessive number of men on it, do you think that a fine would be justified ?—I do not think that they would attempt to fine. I think they would summon him.

37072. You think it would be correct in a case of that kind ?—Yes.

37073. Because it is a danger to himself and perhaps to the other men. Rule 64 says: "No person, without authority, shall give any signal, or improperly use, or without authority remove or interfere with any signal, signal wire, or signal apparatus." If a person disobeys that rule, do you say that a fine of 1s. 6d. or 2s. 6d. by the manager would be sufficient ?—I cannot give my opinion upon every one of these rules.

37074. These rules are for the safety of the individual workman and the general body of the workmen. Which of those do you think would be justified by a fine ? They are all dealing with safety, and a breach of them may lead to danger. Is it really breaches of the Special Rules that you and your men were thinking about when they spoke of it being placed in the hands of the manager, and asked to have a fine ?—Yes, in some cases breaches of Special Rules.

37075. Danger to life arising from a breach ?—No, not if dangerous to life.

37076. Do you know any of those rules which forbids anything or lays down anything ?—Take 76, just that one

37077. "Any person passing through a door or cloth must instantly close it" ?—Supposing he did not do it ?

37078. Supposing he did not do it, what might be the result in a fiery mine ?—I am speaking of mines which are not fiery.

37079. Some are fiery ?—We have only one with lamps in.

37080. You have two ?—One, and a few in the other pit, I said.

37081. Those lamps are there, I suppose, because of gas ?—Yes.

37082. Those Special Rules apply to all the mines ?—Yes.

37083. You cannot differentiate between where a person shall be fined in one part of your district and where he should not be fined in another part ?—Yes, you could, if I were manager.

37084. If a person leaves a door unscreened with cloth, it is for the purpose of regulating the ventilation of the mine, and where a person leaves a door open for a short time or a screen not down properly it might interfere with the ventilation ?—If left open a couple of minutes it would not interfere with the ventilation of the mine much.

37085. You do not think that a person would be fined for leaving a door open two minutes. It takes some time to accumulate a quantity of gas. Do you think a fine would be insufficient where a person leaves a door open ?—Not to leave it open for long.

37086. Where you justify fines will you fix the time it should be left open before a prosecution ?—No, I am not going to fix anything about a fine. I was thinking of things that pertain to the Contract Rules.

37087. Do you know any Special Rules which deal with anything but the safety of the workmen ?—No.

37088. Do you and your workmen justify a fine between the workman and the manager where the life of the individual himself or his fellow men is at stake ? Do you not think a prosecution would be the greatest deterrent ?—It might be a greater deterrent than fines.

37089. I will put it straight to you whether or not a prosecution is likely to be a greater deterrent than a fine ?—Yes, I think it would be.

37090. I put that in view of your answer to the Chairman. You said because of the shame and publicity you object to go to Court ?—Yes, in some things.

37091. Is not the cause of that shame and publicity likely to be a greater deterrent than the present fine ?—It might be a greater deterrent than fining a man.

37092. Could you go beyond "might" ? Do you know yourself whether it would or not ? Let us have it would or it would not, if you think it would or it would not ?—I think in some cases it would and in some cases it would not.

37093. In some cases a public Court trial would not be a greater deterrent than a fine of 2s. 6d. ?—No not with some men.

37094. Take it you are still in favour of fines being continued; I want to put a further question. There are sections in the Coal Mines Act of which a manager may be guilty of a breach, such as Section 1, which says a proper amount of ventilation shall continue round the mine. It would be a breach of that if it is found that a manager does not see that sufficient ventilation goes round the mine ?—Yes.

37095. There are probably 40 or 50 other sections of the Coal Mines Act or Special Rules ?—Who is going to say there is no proper ventilation ?

37096. I will come to that in a moment. The manager of the colliery and the deputy are bound to carry out certain sections of the Coal Mines Act, or see that they are carried out ?—Yes.

37097. If they do not do so they are guilty of an offence against the Coal Mines Act ?—Yes.

37098. Would you and the members of your Association be willing to permit a system of things which would allow the mines inspector to fine a manager for a breach of the Coal Mines Act rather than take him into Court ?—I was dealing with men being fined and not dealing with the inspector and the manager.

(*Mr. Cunynghame.*) Do you mean fining with his own consent ?

37099. (*Mr. Smillie.*) Yes. You are in favour of the miners being fined for offences against this Act if they agree to it ?—Yes, if they agree to it in writing.

37100. Would you be willing that there should be legislation to permit the mines inspector and the manager agreeing that the manager should be fined for a breach of the Coal Mines Act rather than take him to Court ?—You are putting that to me personally ?

37101. Yes ?—No, I would not.

37102. You think in every case where the mines inspector is of opinion that the manager has been guilty of a breach of the Coal Mines Act that the manager should be taken to Court ?—You want to make it appear to me that I am in favour of the manager and the men agreeing, but not the manager and the inspector.

37103. Yes ?—I cannot answer that question further than I have. I said, personally, no, I would not.

37104. You are not in favour of a system which would give the inspector and the manager power to agree without going to Court where a breach has taken place ?—No.

37105. You are in favour of a system which will allow the colliery manager and the workman to mutually agree to a fine where a breach of the Coal Mines Act has taken place ?—Yes.

37106. In propping, your leading prop, which the inspector is insisting upon in one of your seams, has been in vogue many years in some of your seams ?—Yes.

37107. Where the roof is specially dangerous ?—Yes.

37108. The men usually, in addition to carrying out those Propping Rules, systematic timbering, put in a leading prop because of the danger which may arise between the tub and the face ?—Yes.

37109. Mr. Stokes is anxious that that leading prop should be introduced and carried out in the other seams where the roof is strong and there is no apparent reason for it ?—Yes.

37110. That you object to ?—Yes.

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37111 You do not object to the systematic timbering, putting props at least 6 ft. apart no matter how bad the roof is ?—Yes.

37112. You are willing that should be done ?—We think it ought to be done.

37113. You object to the leading prop being established wherever the roof is good and there is no real reason for it ?—Yes.

37114. Your reason for that being, in the first place, that it is in the miner's way without there being any necessity for it being there at all ?—Yes.

37115. In the second place it is a source of danger, because falls of coal from the working face 6 ft. high might knock it out and injure the men ?—Yes.

37116. Have you secured that all over your coalfield the leading prop shall not be insisted upon ?—There is only one pit it is insisted on, and that should be only when required. Where I say the leading prop has been set many years, the men have not been forced to it. It is on their own behalf. I think where the timbering is done by the men in charge, the manager should be sure that the men are practical men with plenty of knowledge so far as they can judge.

37117. In the first place something should be done to secure that the person having charge is a thoroughly practical man ?—Yes.

37118. A man who will know reasonably where timber should be set ?—Yes.

37119. In addition to the system of timbering where danger arises from bad roof or anything else, that the man should know and have power to act ?—And will set a prop.

37120. Yes; but a thoroughly practical stallman should not be forced to set props where there is no reason for them being set outside the ordinary limit ?—Yes.

37121. With regard to the examination by the deputy, I want to ask you a question ?—I should like to add about safety lamps where the lamps have been put in the wages of those men there—in one of the pits in that district—they have gone down considerably.

37122. The 2d. a ton they receive, you mean ?—It is not made up to the amount.

37123. You, yourself, are a practical working miner of many years' standing ?—Yes.

37124. You have worked with close lamps and candles ?—Yes.

37125. Has your experience been that a person has the same opportunity of protecting himself against falls of roof and sides when working with a close lamp as with an open candle ?—My experience is the other way. A man with a candle can see better and detect the cracks in the roof than with a lamp.

37126. You have no figures to prove that ?—No; that is from personal experience.

37127. From your personal experience a person is able to protect himself better against falls of roof and sides with a naked light than with a close lamp ?—Yes.

37128. In the second place it gives more light ?—Yes.

37129. And is more easily handled ?—Yes, shifted about from places better. I saw in some of the evidence given that there had been less accidents where the lamps were used. I do not think it right to impute less accidents in mines and stalls especially to the use of safety lamps, but to a good supply of suitable timber, and care in making charge-men of stalls, that is, placing men in these responsible positions. I think that has had more effect on accidents.

37130. You ought to take care to put thoroughly practical men in charge of stalls and see that there is a proper supply of timber ?—Yes.

37131. Have you any number of unskilled persons employed in your mines ?—Many lately. They are not put to the stall work. They are on the road chiefly.

37132. Doing labouring work chiefly ?—Yes.

37133. They may be put in under the charge of a thoroughly experienced stallman ?—And some have been, lately.

37134. You think it would be a source of danger to start a number of unskilled persons to work at the face unless each workman was under a skilled practical man ?—Yes, certainly.

37135. Even in stowing, doing labouring work on the haulage roads, or the stowing roads, it might be a danger for an unskilled person to work alone ?—Yes, or two unskilled persons working together.

37136. Your examination in the morning by the deputy may be made within three hours of the workmen going into the place ?—Yes.

37137. In fiery mines are not three hours too long a period to elapse from the time a deputy makes the morning examination till the workmen go in ?—I should think it would be too long before the workman went to his working place.

37138. A considerable accumulation of gas might take place ?—Yes.

37139. The place might be clear when the deputy made the examination, but two hours afterwards there might be a considerable accumulation of gas ?—Yes.

37140. Your workings are longwall ?—Yes.

37141. Is there not continuously a crush and change taking place in longwall workings at all times ?—Yes.

37142. More so than where coal is mined by the pillar and stall system ?—Yes, but as a rule there is a better course of ventilation.

37143. The ventilation sweeping all round the longwall faces makes it less liable to have an accumulation of gas ?—That is so.

37144. Even three hours might be too long, even from the point of view of safety, from the time the deputy makes his examination. Many things might happen at the face within three hours with the crush on. Stones might become bad which were quite good when he was there ?—Yes.

37145. From that point of view you think three hours is too long ?—Yes, it might be three hours. It means it could be three hours, but I do not think that there is any place where it is three hours.

37146. I do not think there is, but it permits of there being three hours ?—Yes. The examination is generally made just before the men go in.

37147. The Special Rules provide that it may be three hours ?—Yes.

37148. You think a Special Rule as wrong which would permit of it being three hours ?—I do not think it ought to permit three hours.

37149. Have you any complaint to make as to the extent of your deputies' districts ?—No.

37150. Are they too large ?—Since this shot-firing Order came into force they have put a lot of men on shot-firing. They act as deputies as well as shot-firing.

37151. Are you satisfied with the status of your deputies, that they are good men with practical experience and theoretical knowledge to justify their appointment ?—I have heard no fault on the part of any of the deputies.

37152. You are well pleased with the present system ?—Yes. I think sometimes they might put shot-firers on too young. The other day I saw a shot-firer, 29 years of age, who has not been working in a stall. I think that is too young. I also think shots should be fired during the turning shift not between shifts, it would take less shots and not expose the roof for such a long time.

37153. Some precaution should be taken that a person is thoroughly acquainted from practical experience and age to justify his appointment ?—He should have practical knowledge of the stall and the roof where he goes to fire a shot.

37154. (*Mr. Cunynghame.*) I find that I omitted to ask you one question. With regard to inquests you wanted to say something. I will read it, because it is practically what you say: "There should be at least three practical working miners on the jury or three men who have been practical miners. An official of the deceased's trade union should be allowed to attend without having to obtain the consent of a majority of the workmen or be subject to an Order by the coroner. The trades union official should be allowed to examine witnesses in the interest of the relative of the deceased and the association" ?—Yes. I have a little more here. The trade union official should be allowed to examine witnesses in the interests of the relatives of the deceased, the workmen at the mine, and the association. There are reasons for that which prove conclusively to me why miners should be on these juries. Our coalfield is close to Leicester, and when serious accidents occur they are often conveyed to the Leicester Infirmary, and the jury have been of Leicester townsmen, who had never seen a pit and knew nothing about the working of a mine, and it has been difficult to make them understand the real cause of the accident. I think, wherever a miner gets killed that there ought to be some practical miners on the jury.

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37155. You would also give to the trades union official a right to examine witnesses ?—Yes.

37156. Would you not give the coroner the right to say "You may put this question," or would you give him an absolute right in spite of the coroner ?—That he should be there and put questions in spite of the coroner.

37157. Supposing there was a witness whom the jury were considering whether to send for his trial for manslaughter, would you give the trades union official a right to say: "Are you guilty of a breach of the rule or not ?" Just think of the question and consider it ?—The coroner might keep the man in certain order in asking questions.

37158. It is a very relevant question, I am sure you will see ?—The trades union leader ought to be allowed to ask questions

37159. Even if that man was on the preliminary stages of trial for possibly an offence which would send him to penal servitude ?—Certainly, the coroner ought to warn the man if he said anything.

37160. Have you not forgotten that this coroner's court is a preliminary criminal court, and in criminal courts it is not usual to allow anybody, however interested, to ask questions at his will ?—Not at his will. I was thinking the man could not ask questions at all if the coroner ordered him not to.

37161. In a Criminal Court is it not better to allow the Judge to be the judge of what questions should be asked ? This is the point. Have you not possibly forgotten that a coroner's inquest is not merely a Court of Enquiry, but a preliminary Criminal Court where perhaps the right of asking questions ought not to be so indiscriminate as you suggest. Have you thought of it from that point of view ?—Yes. We had a case where we thought a man was very nearly sent from Leicester through, I think, a jury of townsmen and there being no one to represent the man at the time.

37162. At all events you have sufficiently considered that a coroner's inquest is a Criminal Court really in this instance ?—Yes.

37163. That might make you pause when you demand for a Trade Union official or anybody else a right to ask questions independent of the coroner, where a man is in the preliminary stage of being tried ?—In that case it would be best left alone asking the questions, anyhow.

37164. You want the truth to come out ?—Yes.

37165. The causes of the accident, and to prevent it in future ?—Yes.

37166. Could that not be done, in cases where it was necessary, by subsequent enquiry, not before a coroner, but before experts, as the Act provides ?—Yes. One reason why I think a Trades' Union official ought to be there is this: under the present law he has to get the appointment in writing by the majority of the men, and it takes him time to get that appointment.

37167. Where it is necessary for the workmen to unite and write an order to attend you think that quite superfluous ?—Yes. *Mr. L. Lovett.*

37168. I have quite understood that point. Again, I suppose it would be rather difficult to secure in coroner's inquests all over the country that where a seaman were killed there should be three practical seamen, and where a doctor was alleged to have illtreated a patient that there should be practical doctors. If you applied your rule universally and had in every coroner's inquest three practical men who knew the thing, it might make inquests difficult ?—I was thinking of a miner's inquest. 5 Feb., 1908

37169. There are other considerations, and I want to put them before you ?—Quite so. I was thinking about fatal accidents in mines when I put that.

37170. I quite see the point of view. In the examination for managers and under-managers there should be some practical workmen on the Board ?—Yes.

37171. To examine them orally, you mean ?—Yes.

37172-3. Do you not think it would be better, when you have the paper part of the examination, to have one paper set for the whole of England, not a local paper for each place, but one paper the same for everybody ?—I think it would be fair.

37174. Have you heard that it is easier to get your pass in some places than at others ?—Yes.

37175-6. Do you not think it is desirable that it should be equally difficult all over the country ?—Yes, and the same test, I think.

37177. Then with regard to sanitation in mines you think that the roadways might be made cleaner ?—I think they might.

37178. That could be done by a good Special Rule ?—I should think it could be done by a Special Rule.

37179. Then men would approve a rule ?—I could not say that they would approve a rule, but it should not be any detriment to them in taking them away from their work.

37180. Are the roadways foul at present from odour. Is that what you mean by sanitation ?—No; I mean by sanitation any cases of ankylostomiasis. I was talking of it in that way. There is not the same convenience on the roads to ease nature as there is on the stalls.

37181. You would have places made at intervals for men to go ?—Yes.

37182. Would that involve the necessity of the men being liable to a breach of the Special Rule if they did not use it. There is not much in it. A man can be fined who does it in a public street in London. Would you go as far as that or not ?—I do not know that I would. In case there was any danger of ankylostomiasis I would go as far as that.

37183. You do not think it is necessary ?—No.

Mr. Edward Hughes, called and examined.

37184. (*Mr. Cunynghame.*) You belong to the North Wales Miners' Association, and come here to represent that Association ?—Yes.

37185. You would like the present staff of inspectors to be so increased as to enable them to examine each colliery at least every two months ?—Yes, or at least every three months.

37186. That would involve multiplying the present number by about four ?—Yes.

37187. Is the country to pay them for this ?—I suppose so.

37188. You would like some working-men inspectors among them. I use the word practical men inspectors, men who have been practical working miners ?—I should suggest that a third-class of inspectors should be appointed.

37189. I suppose that class would not be expected to advise on the more difficult engineering questions ?—No.

37190. In the second place such men as that could not aspire to the highest positions on the inspectorate unless they were able to pass the engineering examinations ?—That was my intention, that they should have first or second-class certificates.

37191. With regard to the deputies and firemen, you think that they have too big districts at the present time ?—I do.

37192. We have heard a good deal of evidence upon the detail of that, and I will leave it to those who are expert to deal with the question more in detail. I will just take the general points. You do not like fines ?—I do not. I think that prosecutions would have far more effect. *Mr. E. Hughes.*

37193. They might have far more effect, but would it not be for a very small offence rather hard on a man to lose a day's work ?—I do not think so.

37194. You think men would rather be prosecuted than fined ?—Yes.

37195. Actually the men themselves ?—I think so, the best of them.

37196. You have never heard of a man who was offered the alternative of a fine who desired to be prosecuted instead ?—I have known of fines being made and returned to the men in the way of consideration, so consequently it has no effect.

37197. What do you mean by "in the way of consideration" ? Is it not an odd thing to do, to fine a man and hand him his money back ?—The manager feels bound to fine him.

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Mr. E. Hughes.

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37198. That is for public example?—Yes, but nevertheless he does not like the man to suffer financially, so he fines him with one hand and hands him back the fine with the other hand.

37199. That is wrong?—Yes.

37200. Do you not think that a man who acts so wrongly as that manager, who has such a peculiar view of his duties, would be likely, in a case where he ought to prosecute, to let him off?—I do not know; he may.

37201. Do you think he would feel more delicate in one case than in the other? You see my obvious retort; there is that difficulty?—Yes; but personally I would rather be prosecuted than fined. I always object to fines myself in my district.

37202. Supposing the fine was only made with your own consent; you would have an opportunity of being prosecuted instead, if you liked?—I should rather. I have always advocated it.

37203. At present fines are only inflicted with the consent of the men?—Yes.

37204. You could always be prosecuted, if you wished?—Yes.

37205. Would you take away from those who are fined by their wish the right to be fined, and put them into the same box as yourself?—I would. I think it would be to their interest.

37206. If fines were done away with, should we not see the inspector going round and urging a great many more prosecutions, and a great many more prosecutions taking place?—It may have the effect in the long run of reducing the fatal accidents, or accidents in mines generally.

37207. In regard to Special Rules, you would like there to be a thorough understanding as to any proposed new rule, both by employers and employed, before the rule comes into force?—Yes.

37208. And at as early a stage as possible?—Yes.

37209. Is that generally what you desire?—Yes.

37210. I do not propose to go into the whole detail, because we have heard so much about it; but you are in favour of any scheme which will bring that about?—Yes.

37211. What do you say about systematic timbering?—I suggest that we have systematic timbering not only in the face but in the roadways as well. I have the misfortune to represent a district which has during 1906 suffered very much through falls of roof. Our fatal accidents run from falls of roof and sides alone, 1 in 706 employed or 1 in 500 in all accidents. In my opinion, if we had systematic timbering on the roads as well as in the face it would reduce the accidents very materially.

37212. Are there not, at all events in South Wales—I do not remember that I have seen what I am stating in North Wales—some mines where the roads go on, I believe I may say, for miles without any timbering at all?—Sometimes it may happen.

37213. Where it is said that the roof is quite safe—I am putting what has been said to me—and where the timbering would be really more a source of danger than of safety on account of preventing you seeing the pieces that were coming down, and where it is alleged very few accidents have occurred?—It would not be so in North Wales.

37214. You have not seen such a case as that?—No.

37215. Are your roads pretty well timbered, or not?—Not usually; not generally so.

37216. Do many accidents occur through want of timbering in roads?—Yes, very many; one colliery in particular, where we had six fatal accidents in 1906. Three of them, if I mistake not, were caused by falls of roof. I remember being at the colliery only two months prior, and I called the attention of the manager to it. He objected to timbering unless authorised by the fireman, because they had to pay for it. I said the consequence of it will be some of your men will be killed by this bind coal, and it was the cause within two months.

37217. It is that which leads you to think there ought to be systematic timbering?—Yes.

37218. At all events, you would put it in the mines with which you are acquainted?—Yes.

37219. It might be different in some other parts?—I am talking especially for North Wales.

37220. Travelling on haulage roads, you think, ought to be prohibited while the haulage ropes are in motion?—Yes, or that there should be sufficient space on the roadside, and that such space should be on the same side as the manholes.

37221. In most mines is it not the fact that there is sufficient space to walk along without getting in contact with the haulage ropes?—Very often you have to cross from one side of the haulage road to the other, and I suggest——

37222. A bridge?—No; a man walks right along and wants to cross to the left or to the right. I suggest a space for travelling should be on one side of the road, and that it should be on the same side as the manhole, so that if anything was to happen, the man could easily fall into his manhole.

37223. It may be necessary to cross occasionally under the rope for turning down another turning to the left?—Quite so; that would have to be done.

37224-7. At all events, your view is, speaking of your district, that is a defect which ought to be remedied?—Yes.

37228. You next say wherever gas has been found that safety lamps ought to be enforced?—Yes.

37229. You do not mean—if you do say it—where the minutest thimbleful of gas could be discovered by a chemist that safety lamps should be put in?—Personally I should not object to safety lamps in all coal mines, whether gas is found or not, or especially if gas has ever been seen I should have a safety lamp.

37230. If you said "wherever gas has been found" a magistrate would say, "I suppose that must mean where any gas has been found, ever so little." Would not that be equivalent to saying safety lamps must be employed in every mine in the kingdom?—I would not object to it.

37231. Would you force them against the will of the men in districts where they work with naked lights?—I would. I think it would be to their interest in the long run.

37232. How many naked-light mines are there in your district?—Only one or two, very small ones.

37233. Would you force them to have safety lamps?—If I had my own way they would have safety lamps to-morrow.

37234. Are you prepared to say all over the country that naked lights ought to be put an end to, because that is a big order?—I should, myself.

37235. You are aware some people say you are more likely to have falls of roof from not being able to see well in places? Do you think anything of that?—No.

37236. It is a technical subject, on which you would have a better opinion than myself. Lastly, you say that a court of enquiry should be created in each mining district so that the officials in charge may be cross-examined by a legal representative of the deceased. That is where an accident occurred?—Yes.

37237. Do you mean after each inquest?—No. I should suggest, if you wish, call it a board of equal representatives of both miners and employers, men who have experience in mines. As a rule, the juries at coroners' inquests know very little of miners' terms, and so on.

37238. Is it not a fact that under Section 45 of the Coal Mines Act power exists already in the Secretary of State, if he exercises it, to do all that you wish in that respect, and to have an inquiry at which everybody will be present, and have it put into the hands of the best experts he can get?—I am not aware of it.

37239. Section 45 has never been used, as far as you are aware?—Not as far as I am aware.

37240. Would you be surprised and glad to learn that three inquiries have just been made under Section 45, and that the report is just about to be sent in?—That would not occur in each accident.

37241. You surely do not intend that where a ladder falls upon a man and he is unfortunately killed, that a court of inquiry is to be established to say what everybody must know, how he has been killed—not in every case?—The jury at a coroner's inquest want to know the cause of death. We should like to know what brought it about.

37242. I agree with you, but it surely would be unnecessary in a large number of cases to get, in addition to the coroner's jury, a court of inquiry together?—If it was formed one for each District I do not see why it should not be so.

37243. They would have to meet and inquire into every cause of death?—Yes.

37244. Are they to be paid by the State for doing this, or give their services gratuitously?—Their expenses, I should suggest.

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37245. Who is to pay for their day's work which they lose ?—Still the Exchequer, I should say.

37246. You think the taxpayer should ?—If it would be the means of saving life.

37247. I agree ?—If it would, they should pay.

37248. Leave for the moment the question of who is to pay. In this country everybody wishes somebody else should pay, and that is not unnatural, but the point is this: is it not a fact that in the large majority of cases of death it is only too clear and evident how it has occurred without wanting a court of inquiry other than the coroner's inquest ?—In such cases there would be no need for the Board to meet.

37249. In giving your answer to this question you were not fully aware of the provisions of Section 45 of the Coal Mines Act. That is the first question one asks ?—I was not.

37250. It deals with the very subject, and it is rather wise to think of what exists before you propose something else. There is power in every case to order an inquiry by the Secretary of State ?—Yes.

37251. If that power was exercised in all cases in which it was likely to throw light upon some question which would be the means of saving life, that would do what you want ?—The trouble is in getting the Secretary of State to order each inquiry.

37252. Do you think it would be very great ?—Yes, undoubtedly. I should suggest that these Boards should be already created and ready for emergency whenever a case occurs.

37253. And that pay should be provided for the members to compensate them for their trouble in assembling ?—Certainly.

37254. (*Mr. Enoch Edwards.*) North Wales is under the Liverpool inspection ?—Yes.

37255. Have you a resident inspector ?—No.

37256. How many mines have you ?—There are somewhere about 40. I am not sure.

37257. Employing how many men ?—Less than 13,000.

37258. 12,000 odd ?—Yes, according to the 1906 Report.

37259. In case of an accident how far would the inspector have to travel to get to your pits ?—12 to 20 miles at the outside. He lives at Chester, of course.

37260. He visits in the case of all accidents ?—Yes.

37261-3. Does the inspector visit your mines at other times than accidents ?—I could not tell. I notice that his visits during 1906 were 170, and his chief, 78 visits. That is for the whole of West Lancashire, Cheshire, Flintshire and Denbighshire.

37264. You suggest a third class of inspectors ?—Yes. I take it there are two now, the chief and the assistant.

37265. In the extension of this principle you suggest that there should be a third class of inspector ?—Yes. I mean by a third class of inspector a practical miner of not less than 10 years' experience at the face.

37266. In that case he should have sufficient theoretical knowledge to pass an examination ?—Quite so.

37267. He would pass such an examination as a second or first class ?—Second or first. We have, as you are aware no doubt, hundreds of miners holding first-class certificates working at the face—not in North Wales.

37268. In the country ?—Yes.

37269. You will have some, likely ?—Yes.

37270. There are more managers than they can find places for ?—Yes.

37271. From this class of men another order of inspectors should be appointed ?—Yes.

37272. Of somewhat lesser importance, but men who can give more time underground ?—Yes, to give the whole of their time to visit and examine collieries.

37273. They should make thorough inspections of mines ?—Yes, efficiently.

37274. By that you mean a thorough inspection ?—Yes.

37275. A good deal of inspection is done by sample, a part of one pit is taken ?—Yes.

37276. You would inspect the whole of a pit and its workings ?—Yes.

37277. By that means the inspector would be able to advise the management on many matters to prevent accidents happening ?—I do believe so.

37278. More constant supervision would prevent many of these accidents happening ?—Yes.

37279. That is an opinion your North Wales men generally agree with ?—Yes.

37280. If you have more examination by men who are employed by the Government many of the fatal and non-fatal accidents would be obviated ?—I had, only four weeks ago—this is rather strong, anyhow it is a fact—a district of men who had to be returned home for want of timber. The previous day they had worked the whole shift where they ought not to work, and the next day they returned home for want of timber. If the mines inspector had visited that colliery at the time, someone would have known about it, and it would not have happened again.

37281. If the colliery owners are negligent in providing timber, that might happen even if you inspect a mine once in three months ?—Yes.

37282. It might happen often ?—Yes.

37283. The law should be made stronger to meet a case like that ?—Quite so.

37284. At present they are expected to find the men suitable timber ?—They are supposed to find sufficient timber, but they do not do so. That is what I am aiming at.

37285. In such a case where your men had to go home, would it not be well to report that to the inspector ?—(*Mr. Cunynghame.*) It is difficult to see how the law was broken, because if there was not the timber the men were forbidden to work, and it is like closing the mine.

37286. (*Mr. Enoch Edwards.*) With reference to the firemen, you suggest that they should have a limited number of men to look after ?—Yes.

37287. Is your experience now that they have too many men under their charge ?—Yes. These poor men have not time to look after the men in the way of accidents. There are too many men and too many places, and too much travelling between one place and another, and so on.

37288. Have the deputies and firemen other duties than looking after safety ?—Yes; at most of the pits they are supposed to get the coal out, and most of their time goes in getting the coal out.

37289. When he is not examining, his business is to see that the coal is got out ?—Yes. Whether it is his business or not, that is what he does.

37290. You think his ordinary duties as a fireman are neglected because of the other duties ?—Yes.

37291. Would you prefer to see a rule which made it obligatory on the part of the owner to provide firemen who should be separate and specially for these duties only ?—Yes.

37292. His district should be of such a size that he could get round it ?—Yes.

37293. Who would you make the judge of the size of those districts ?—The Inspector of Mines.

37294. You think the Inspector should say whether a district was large enough or too large for the man to attend to ?—I think he ought to say whether the fireman would be able to examine each place at least three times in eight hours, as it ought to be done.

37295. By such examination, beyond the ventilation you mean the sides and roof ?—Yes.

37296. With reference to fines what is the custom in North Wales ?—Prosecution generally. There are only one or two collieries I am aware of where fines have been made, and I objected very much then to it personally, and really the men. They did not care for it It is only in one instance I know of.

37297. They prefer rather that the law should be clear that if there is a breach of the rule they should be prosecuted ?—If they are guilty they prefer being prosecuted to being fined.

37298. With reference to the Special Rules being considered thoroughly, have you any difficulty as to Special Rules in North Wales ?—There is no doubt about it; they know they are there, and that is all they know about them. My suggestion is that Special Rules, before being adopted, should be thoroughly considered by both parties, and if so, the men would have known or understood them when they came into force.

37299. Your present Special Rules have been in force many years ?—Yes.

37300. You have not recently had cause to complain about any rules being put in force without the men being consulted ?—No.

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Mr. E. Hughes.

5 Feb., 1908.

37301. If any such rule was proposed in North Wales would your Government Inspector consult your Society ?—I should expect him to.

37302. You think he would ?—I think he would.

37303. In timbering is it not the duty of the collier to do his own timbering in North Wales ?—Generally in the roads and face.

37304. I am dealing rather with the face—in his working place ?—Yes.

37305. His contract includes the obligation to set timber ?—Yes. Sometimes they are paid so much per bar.

37306. It is part of the contract that the collier should do this timbering ?—Yes.

37307. You think he is the proper person to do it ?—Yes.

37308. He is the most likely person to know how to do it ?—He knows the nature of the ground better than anybody else.

37309. What do you mean by systematic timbering ?—On the road what we call bars should be set, say every yard or so along the haulage road.

37310. I am rather dealing with the face, where the man works. The man does not work on the haulage road. It is his duty in his contract to set his timber ?—Yes.

37311. Have you reason to think he does it to the satisfaction of everybody ?—No ; it is not always allowed. I have known instances I referred to just now, where the men were prohibited from setting timber because they would not be paid for it, unless instructed by the fireman.

37312. In setting timber you are not referring to setting props, but to putting bars across ?—Yes.

37313. For that you would have a special schedule rate in your price-list ?—Yes.

37314. If a man sets timber it is so much a bar ?—Yes.

37315. Many want 2s. plus the percentage ?—Yes. Some managers say that the men set the bars when they have nothing else to do, consequently they object and say they are not necessary.

37316. They object to that on the ground of payment, not on any other ground ?—Not on any other ground—well, they say they are not needed, of course.

37317. When you referred to falls of roof I understood you to say three deaths in one pit from falls of roof. You do not mean the roof of the working place ?—Yes, not in the face, but the roadway leading to the face.

37318. (*Mr. Cunynghame.*) I thought he meant the roadways.—Not the haulage roads ; say what we term the jig.

37319. (*Mr. Enoch Edwards.*) Is it his business to timber his jig ?—Yes. That was the question, whether the timber ought to have been set.

37320. That was setting timber where he would be expected to be paid 1s. 6d. or 1s. 2d. for setting bars ?—Yes.

37321. There is a rule which most pits have of paying 1s. 2d. plus a percentage for every 6 ft. bar ?—Yes.

37322. There is something of that sort as a general rule ?—Yes, there is a scale.

37323. In this case the timber was not set because they would claim payment for it ?—Yes. He was told that the timber was not needed there.

37324. That is the workman ?—Yes ; the fireman goes round. The manager's instructions were that the fireman must instruct the man before he is allowed to set the prop ; consequently the man would naturally not set the timber until the fireman instructs him to do so. They say they would not be paid for it, and consequently this bind falls down for want of timber.

37325. Do you want to impress on this Commission that plain fact, that a place in a jig, a roadway leading to a place, requires timbering ?—I do.

37326. And that they have refused to allow the man to timber because they had to pay for it ?—Quite so. They refuse to pay because they consider the timber is not needed.

37327. As the result three men were killed ?—Not exactly. Two men were killed under this bind.

37328. In that particular case ?—Yes, quite so.

37329. That is rather a serious matter, if it is a mere question of paying, to put up bars and it results in deaths ?—Yes.

37330. You suggest this niggardly policy results in the death of a man or two ?—Yes. The collier working on the face ought to know better than anyone else where a prop or bar is required, and he ought not to wait until instructed by another person that a bar is required. He ought to be at liberty to set it.

(*Mr. Cunynghame.*) At the same time it would be reasonable to prevent a man being paid for setting up unnecessary timber and making a mere excuse to set up timber in a useless way.

(*Mr. Enoch Edwards.*) Except this, the setting of timber, except in very rare cases, is a work that is barely covered by the amount of money paid.

(*Mr. Cunynghame.*) That would be a sufficient deterrent against a man setting useless timber.

37331. (*Mr. Enoch Edwards.*) There is considerable labour in preparing the timber itself and setting it in that form. With regard to your travelling rules in North Wales, you suggest travelling on the haulage roads should be prohibited ?—Yes.

37332. That is so now while wagons are in motion ?—Not generally.

37333. You do not refer to mechanical haulage ?—Yes.

37334. Where you have mechanical haulage in a road they do not allow men to travel while the journeys are going ?—They do.

37335. In many places they are prohibited from travelling whilst in motion, because they often come into trouble then. The Commission has been pressed with the view that there should be separate travelling roads. You suggest that there should be a road sufficiently clear on one side only ?—Yes.

37336. And that on the side where the manholes are ?—Yes.

37337. It would depend upon the physical condition of the roof ?—Yes.

37338. Are these haulage roads you are referring to double roads ?—Not always.

37339. If it was a double road and there was a road by the side, that would take a big span and require a strong roof ?—Yes.

37340. In laying out collieries there is no reason they should not be laid out with separate travelling roads ?—No.

37341. In such cases, a road could be made where the roof would stand by the side of the haulage road ?—Yes.

37342. I understand your suggestion about lamps. They are generally used in your district ?—Yes.

37343. You have no complaint to make about the question of lamps ?—No ; no complaint at all.

37344. The court of enquiry you have already answered the Chairman about. Have you much complaint about the coroner's courts in North Wales ?—No, we have no room to complain.

37345. In case of death of any of your members, you would attend the court ?—Generally.

37346. And put any question you like ?—Yes.

37347. You have not any difficulty ?—Not at all ; not any at present.

37348. (*Mr. Smillie.*) Your Special Rules provide that an onlooker or fireman shall make an examination in the morning, but it provides that it shall be made within three hours before the commencement of each shift. Yours is a fiery district where safety lamps are used generally ?—Safety lamps are used generally.

37349. Do you think three hours before persons go to the face is a safe time to make an examination ?—No, it should be as near as possible to the time they commence work.

37350. Are you aware three hours is the longest period that exists in any part of Great Britain ?—I am not sure if three hours are specified in our Special Rules.

37351. I am looking at your Special Rules, and No. 45 says : "The fireman appointed for the purpose shall within three hours before the commencement of each shift, make the inspection required." Many things might take place within three hours ?—Yes.

37352. You think the time should be reasonable, one hour, or an hour and a half ?—One hour, I should suggest.

37353. One hour would be sufficient ?—Yes.

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37354. Special Rule 53 is a new rule, and says: "The fireman shall see that the maximum distances between the roof supports, as specified in the notice required by Special Rule No. 2A, are not exceeded. He shall also see that a sufficient supply of suitable timber is kept at or within 20 yards of every working place where mineral is being worked." That puts the onus on the fireman or on-looker to see that a supp'y of timber is kept within 20 yards of the working place?—I say it ought to, but it does not.

37355. Take Rule 111, where it puts the onus on the miner to see that the wood is conveyed. "The miner shall secure the roof and sides of his own working place." Does not that put the responsibility on him for securing his working face and also his road-head where those dangers arise you speak of?—It is his duty to do so. but they say the timber is not needed.

37356. If a miner did not secure what seemed to be a dangerous part of the roof, he is li ble to be charged with a breach of this rule?—Yes.

37357. And if he does take precautions to put up bars, the fireman may come in and say: "You have no business to put that up; it was not required"?—Yes. "And I will not pay you for it."

37358. And force him to take it out?—Yes. Only last week I was at a colliery and the remark was made unless the timbering was required the fireman should strike it out.

37359. If the fireman knocked them out——?—If the firemen consider that they are not necessary after the collier had set them, they will knock them out. My opinion is that the collier is entitled to secure his working place. If he thinks a bar is wanted he ought to be able to put it up.

37360. He is responsible under this rule for doing so?—Yes.

37361. If you think a set of timbers is required and you put them, and the fireman knocks them out, you would not think it was safe to work there, and you might run a risk of losing your life?—Yes.

37362. It is ridiculous to say the miner is to be responsible for putting timber where he believes there is danger, and that some other person who is not in that danger is to say you are not to put them up. You want that put right?—Yes.

37363. Mr. Cunynghame wisely put it to you that it would not do where miners are paid a fixed allowance of 1s. to let them put up indiscriminately whether required or not what timber they liked, but, as a matter of fact, in systematic timbering, that is done. It is provided you must put up every 6 ft.?—Yes, whether necessary or not.

37364. Every 6 ft.?—It varies; 6 ft., 4 ft., and 5 ft.

37365. Whether required or not, no matter how strong the roof is, you must under the systematic timbering rules put up the timbering there?—Yes.

37366. No fireman would dare to tell you you were not to do it or take them out, because you were carrying out the rules?—Yes. I want the same rule on the roads.

37367. In many cases under systematic timbering, timbering is put where there is no apparent reason for it, only systematic timbering?—Quite so.

37368. In these main roads and headings you think that the miner should be entitled every 3 ft. at least to put up his bar or some specified distance that is considered safe?—Yes; 4 ft.

37369. You believe that would lead to greater safety?—There is no doubt about it. I have no doubt in my mind.

37370. Have you any fault to find with your present class of firemen?—Yes.

37371. Are they the best class of men?—No, I am sorry to say not. I have been expecting that question. I believe that deputies or firemen should go under an examination. They ought to have some third-class certificate or a second-class certificate.

37372. They should hold a certificate to prove their competency for that work?—Yes. I am sorry to say now several of our remen are such, because they are well in with the official of the colliery.

37373. Several firemen are such through favour?—Yes, there is no doubt about it, we should have the most experienced men for this position. I believe firemen ought to be of such experience that they are capable to instruct the collier where and how a prop or a pair of timber or a sprag ought to be set. It is not so now, the best men will not have a deputy's job. The colliers are far better paid than the firemen.

37374. (*Mr. Enoch Edwards.*) It is a question of wages, largely?—Yes, I think it is wrong. If these men were well paid you would have the best men in the position of firemen.

37375. (*Mr. Smillie.*) If there was an examination to prove a person was competent for the work, there would be no dearth of firemen. You would still be able to get plenty of skilled persons to do the work?—Yes.

37376. It would not mean any great difference in wages either in order to secure good men, I mean on the staff of a colliery it would not mean much, supposing 20 or 30 men were paid an extra 1s. a day for extra competency or skill?—No.

37377. It would not mean the ruin of the colliery or stopping it?—No.

37378. Rule 111 (*b*) is a new rule which lays down that "The miner shall take a sufficient supply of timber to his working place, or within 20 yards thereof, ready for use, from the place where he or his filler gets his empty tub." Is it a common custom for the wor men to draw their own material?—In one or two collieries I believe it is. They take their materials as near as they can to the face, but generally the timber is supplied within the specified distance, that is 20 yards or so. There is, I believe, a colliery or two—I have heard the complaint—where they have to take their material in.

37379. In that case they are responsible for taking it from the place where they take the empty tub from?—Yes.

37380. You put a serious aspect where a number of men were required to go home for want of a proper supply of timber after they had worked in a dangerous place. They went home because there was no timber. Under the Mines Act and Special Rules they are bound to withdraw from a place if there is not a supply of timber?—Yes. Our experience is that once a man is down a mine and commences to work he does not believe in leaving without earning a day's wage.

37381. It is a breach for firemen to allow men to go in if there is no timber. May I suggest to you a cure for this kind of thing. Supposing the workmen come down the mine in the morning and proceed to the lamp station and are told that the place is all ready, and they go into the working face and find no timber, and it would be risking their life to work, if the manager was held responsible for the day's wages when they went home that would cure the evil largely?—I think it would.

37382. Do you not think it fair if the workmen are sent home through the fault of the management from not having a supply of timber, that they should be entitled to be indemnified?—I do think so.

37383. If they were so indemnified do you think there would be many cases of workmen going home through want of timber?—I do not think so.

37384. Not so many as now?—No.

37385. You can imagine some case arising from a lack of timbering where it had been ordered but had not come in, but a want of timbering at the face does not arise from a want of timber at the surface?—No.

37386. But because some person responsible has not done his duty?—Yes.

37387. By holding the employer responsible for paying the wages it would not happen so often?—I think it would not.

(*Mr. Cunynghame.*) That would be an ingenious fining system brought in.

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APPENDICES.

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APPENDIX I.

(Handed in by Mr. W. B. Charlton—see Question 25819.)

Regulations of the Durham County Colliery Enginemen's and Boiler-Minders Associations relating to Apprentices.

SECTION 1.—Any person wishing to become a member of this Association, to be taught the art of winding, must obtain the consent of some competent financial member or members who will undertake to teach him, and be proposed and seconded by two financial members at least one month previous to his admission; he must have served at least three years in the capacity of some kindred employment as firing, boiler-minding, or attending engines, and be of good moral character, steady habits, and possessed of good ability. Having first obtained the consent of the management of the colliery, he shall be subject to an examination by the Committee of the Lodge in which he is proposed, after such examination, if he be found to possess the above qualifications, the Lodge Committee shall make out a report to the above effect, signed by each member of the Lodge Committee, and stamped with the Lodge stamp. The Lodge Secretary shall transmit the same to the General Secretary, who shall lay the same before the Executive Committee for their approval, and if approved, the General Secretary shall make out a certificate, duly signed by the Executive Committee, and stamped with the Association stamp, and return the same to the Lodge Secretary, who shall admit the person as a member.

SECTION 2.—The learning fee of apprentices shall be five pounds, to be paid into the general fund, three pounds to be paid before the commencement of learning, and the remainder to be paid in two instalments of one pound each within three months after being admitted a member.

The fee for member's sons to be two pounds ten shillings, to be paid into the general fund, twenty shillings before commencing to learn, and the remainder to be paid in two instalments of fifteen shillings each, within three months after being admitted a member.

After he obtains his certificate from the Executive Council, and signed by the resident manager or engineer by whom he is employed, he will then be at liberty to learn.

Any apprentice paying the stipulated sum according to rule as learning fee to be taught the art of winding shall be at liberty to receive instructions from any member who is working a colliery engine.

SECTION 3.—Any member incompetent to wind who has been three years in the Association, desiring to be instructed to a state of competency, shall pay the sum of two pounds ten shillings to the Association, provided he has the stipulated time in preliminary training, viz., three years. Any member who has not the specified time in preliminary training as per Section 1 of this rule, or who has not been a member of this Association for a period of six years, shall pay the learning fee of five pounds.

SECTION 4.—(*a*) Any person who has had the necessary preliminary training as per Section 1 of this rule wishing to learn the duties of underground hauling or bank hauling or any other class where tuition is imperative (except winding) must pay a fee of two pounds ten shillings. Having learned such duties, and wishing to learn to wind, within three years after having paid his first fee, must pay a further fee of two pounds ten shillings; but if over three years from the time of paying his first fee of two pounds ten shillings, then he must pay a fee of one pound five shillings; members' sons will be charged half fees.

(*b*) Any member wishing to learn the duties of hauling or any other class of engines where tuition is imperative, who has not paid an apprentice fee, but who has been a member of this Association for a period of three years, and has had the stipulated time in preliminary training, as per Section 1 of this rule, shall pay a fee of one pound five shillings. Any member who has not the stipulated time in preliminary training, and who has not been a member of this Association for a period of six years, shall pay a fee of two pounds ten shillings.

(*c*) Any member wishing to learn the duties of winding after paying the fees and otherwise complying with the terms specified in this section, shall pay a further fee of one pound five shillings; members' sons half fees.

Any apprentice having received instructions for twelve months and found to be competent, the enginemen whom he is under, and the manager or engineer, shall sign a certificate of competence, prepared by the General Secretary, and stamped with the Association stamp, which shall enable him to procure a situation as colliery engineman.

Should any prejudice or ill-feeling arise against any apprentice by the men he is under, or any member of the Association, his case shall be submitted to the Local Committee or Executive Committee, who shall investigate the same, and give their award as they may determine.

Any member or members violating this rule shall, for the first offence, be fined five pounds; for the second, ten pounds; and for the third expelled the Association.

FORMS OF CERTIFICATE.

DURHAM COUNTY COLLIERY ENGINEMEN'S AND BOILER-MINDERS' ASSOCIATION.

Registered Office: 26, WESTERN HILL, DURHAM.

Date.....190 .

CERTIFICATE OF LEAVE TO BE GIVEN TO ANY PERSON WHO IS ACCEPTED TO BE TAUGHT THE ART OF { HAULING. / BRAKING.

THIS IS TO CERTIFY *that we have examined the report and application of the*.....*Branch of this Association, for*.....*to be taught the Art of* {*Hauling,* / *Braking*} *and find the same to be satisfactory.*

Signed,	*Committee.*
President	.....
Treasurer	.....
Secretary	.....
	.....
	.....

Manager's or Engineer's Signature.....

DURHAM COUNTY COLLIERY ENGINEMEN'S AND BOILER-MINDERS' ASSOCIATION.

THIS CERTIFICATE OF COMPETENCY IS GIVEN TO ANY MEMBER WHO HAS BEEN UNDER INSTRUCTION TWELVE MONTHS FROM THE DATE OF HIS CERTIFICATE OF AUTHORITY, AND FOUND TO BE COMPETENT ACCORDING TO RULE 38.

THIS IS TO CERTIFY *that Mr*.....*a Financial Member of this Association, is now a competent* {*Hauling-man,* / *Brakesman*} *and has been legally instructed under our care.*

Date.....190 .

ENGINEMEN WHOM LEARNT UNDER.

Signed.	*Residence.*
Mr.	.....
Mr.	.....
Mr.	.....

Manager's or Engineer's Signature.....

(ASSOCIATION'S STAMP.)

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APPENDIX II.

Appeal for legislation, drafted by Mr. Thomas Watson, and approved by the National Federation of Enginemen's and Boilermen's Protective Associations of Great Britain.

(Handed in by Mr. T. Watson—see Question 26143.)

Your assistance and support are earnestly solicited in favour of the following amendments to the Mines Regulation Acts, which all men deserving of their country's reputation must admit are of the most vital importance, as additional safeguards, to prevent those deplorable pit accidents which from time to time thrill with horror and apprehension the mind of those who have to descend into the bowels of the earth for a livelihood. Such amendments have been discussed and approved of by the National Enginemen's Protective Association, the Trades Union Congress, and the Miners' Federation of Great Britain. The latter have generously inserted them in their Mines Act Amendment Bill, and should, in consequence, meet with impartial consideration at the hands of our Country's law-makers, and merit a place upon the Statute Book the first convenient opportunity.

Appended to each clause you have a few out of an abundance of reasons justifying the enactment of such provisions.

1st.—That there be added to General Rule 24, of Mines Act, 1887, after the words below ground in the mine :—

> "*And no such person to be employed for more than eight hours in any twenty-four hours.*"

"Our claims for an Eight-Hours' Day are fully justified owing to the tedious and fatiguing nature of our work, such as being confined in a close and stifling atmosphere, with nerves strung to the highest possible tension by clatter and confusion of signals, the rumbling of machinery, which has to be manipulated by us with the greatest possible precision and judgment, with variable loads and steam pressure, always expected to get the best possible results out of machinery, necessitating a high rate of speed, which makes it all the more difficult to control, and finally, at the close of these long and exciting days, each engineman has from 300 to 600 men and boys to wind up, necessitating extra caution and judgment at the very time the enginemen are exhausted and weary by the tedious nature and long hours of their occupation; and should receive Parliamentary attention at once, as a vast majority of fatal accidents attributed to engine-winders' oversight have occurred at the latter end of the long and unreasonable turns enginemen have to work; which coroners' juries investigating such fatalities can most emphatically affirm."

2nd.—That there be a General Rule inserted in the Mines Act Amendment Bill :—

> "*To enforce Catches or Kepts to be put under the cage while men are getting in and out, and that there be a banksman in attendance during the whole time the men are ascending or descending.*"

"These, we are fully persuaded, are very desirable safeguards, as the engineman could not lower the cage (even if he received a false signal) whilst men were getting in and out of the cage. These features were embodied in the 120th and 128th Special Rules, but were rendered ineffective by the authority given to managers by the 121st Special Rule of the Mines Regulation Act, 1887, which, for the sake of economy, is often abused by officials, at great risk to life and limb. In some instances catches are so constructed that the engineman has to remove them from under the cage from the engine-room. This is also a dangerous practice, because if the engineman received a false signal he would take the catches from under the cage and start the engine, fully impressed that all was right, probably at the sacrifice of someone's life, which, unfortunately, has frequently been the case, in addition to thousands of hair-breadth escapes which take place annually at collieries where no catches are provided, that could and would be avoided if kepts or catches were made compulsory."

3rd.—That there be a General Rule inserted in the Mines Act Amendment Bill :—

> "*That Enginemen be compelled to give return signals to the Hooker-on before starting the engine when men are about to ascend or descend. Also that signals be registered until complied with.*"

"The first is imperatively necessary, because both the browman and engineman are supposed to be ready before the signal is given to the hooker-on for men to get into the cage, but where the browman has charge of the return signal it is frequently given without ascertaining whether the engineman is ready or not. In some instances Enginemen might not be ready, consequently the men in the cage at the bottom might become alarmed at the delay and attempt to get out again just at the moment the engineman was starting, entailing loss of life.

"Self-registering signals are eminently desirable as a check to the over-taxed mind of the engineman, who has to concentrate his attention (under ordinary conditions) to three important objects at once, *i.e.* :—

The signal from the bottom;

The signal from the brow; and

The manipulation of the engines,

which makes it difficult to remember the signals, especially if there should happen to be a little delay with the cage at the surface. Under such circumstances, immediately the browman is ready he gives the signal 'go on' to the engineman (irrespective of any signal from the hooker-on at the bottom) and, as a natural consequence, becomes very tempting for the engineman to start the engine, notwithstanding that no signal has been received from the hooker-on at the bottom, and in some instances with fatal results. There is also a variety of other duties claiming an engineman's attention, such as attending to pumps, ventilating fans, boilers, &c., making it difficult for an engineman to hear distinctly the exact signal given. Under the above circumstances, a registered signalling indicator would enable the engineman to see at a glance the nature of signal given; in other words, he would not have to depend entirely upon acoustics, as he would have the assistance of another sense, namely, his eyesight. Hence the necessity for registered signals such as those used for communicating with enginemen aboard modern steamships."

4th.—That there be a General Rule inserted in the Mines Act Amendment Bill :—

> "*That there be a proper speaking tube erected at all collieries for the purpose of communication between banksman and winders.*"

"The desirability of a speaking tube as a means of communication between browman and engineman has long been manifest at all collieries (1st) owing to the distance apart from the engineman and browman are situated, (2nd) the difficulty of not being able to see each other in consequence of steam, smoke, fog, and in some cases a large stack of coal between the engine-room and pit, leaving the engineman entirely dependent upon the browman's voice, which is extremely difficult to recognise owing to men and boys calling to each other, steam blowing off at boilers, the noise made by locomotives shunting wagons, and coal screening, air compressors, and in some cases other winding engines in the same engine-room. There are also various cases throughout Lancashire where enginemen are actually winding with their backs towards the pit. These various evils make it utterly impossible for an engineman clearly to understand his signal from the browman, which is a crying evil that has cost many a poor fellow his life."

5th.—That General Rule 30 of Mines Act, 1887, be amended as follows :—

> "*There shall be attached to every machine worked by steam, water, or mechanical power, and used for lowering and raising persons, an adequate steam and foot brake, which shall be of sufficient power to hold the cages at rest, when the maximum weight is attached, and a proper indicator (in addition to any mark on the rope) showing to the person who works the machine the position of the load in the shaft.*"

"This principle has been admitted and adopted, to a certain extent, by General Rule 30, Mines Regulation Act, 1887. But the inspectors do not seem to realise what is an adequate brake. Naturally we should expect an adequate brake to mean one that will hold any load an engine will lift. Hence our definition, which states 'that an adequate steam and foot brake, and each shall be of sufficient power to hold the cages at rest when the maximum weight is attached.'"

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6th.—That there be a General Rule inserted in the Mines Act Amendment Bill:—

> "*That there shall be, in future, only one winding engine in one engine-house, and that partition walls be built between separate winding engines at present in one engine-house. Also that colliery winders be prohibited from doing any work outside of their engine-house while men are down in the mine.*"

"*Re* one winding engine in one engine-house. The necessity of such being placed upon the Statute Book is demonstrated when you peruse the whole evils mentioned, as they are so similar and bound together, that if you are satisfied that one is necessary you must naturally conclude that all are necessary. As regards colliery winders being allowed to leave the engine-room while men are in the mine, Special Rule 102, Mines Regulation Act, 1887, contends that the engineman shall attend during the whole time anyone is below ground in the mine. This does not prohibit managers from insisting upon the winder at any pit (no matter how many men there may happen to be in the mine) going out of the engine-room and attending to the boilers, the ventilating machinery, air compressors, and pumps, in addition to being the ordinary colliery watchman. Under such circumstances we contend that it is impossible for us, as engine-winders, to fulfil our obligations towards our fellow creatures, the miners. Therefore we ask your able assistance in arranging the law in such a manner that it will give satisfaction to us, and protection to them whose lives we, as enginemen, have entrusted to our charge."

7th.—That there be a General Rule inserted in the Mines Act Amendment Bill:—

> "*That detaching hooks and safety catches shall be applied to all pits where persons are lowered into or raised out of mines by machinery.*"

"All practical men must confess that it is almost a crime for Parliament to hesitate in making such compulsory, as there is no chance whatever for those unfortunate persons that happen to be in the cage when overwinding takes place, if there is no detaching and safety appliance to prevent their being hurled over the headgear or thrown down th· shaft, as either means death of the most horrifying description. It might be contended that overwinding fatalities have occurred where safety appliances were provided; but such are invariably owing to detaching appliances being badly erected, or for the want of cleaning, oiling, &c., which some employers have been indifferent about, knowing that such were not compulsory. The result is such unfortunate calamities as that which recently occurred at Westleigh, Lancashire, which makes it imperatively necessary that detaching hooks and safety catches should be made compulsory; also that they should be cleaned, oiled, and examined by a competent person at least once every four weeks."

8th.—That there shall be added to Rule 32 of the Mines Regulation Act, 1887:—

> "*That all boilers be examined (by a competent person appointed by the Government) at least once every twelve months.*"

"The report of the Secretary of the Board of Trade upon the working of the Boiler Explosions Acts, 1882 and 1889, with appendices, tells its own horrible story of the appalling loss of life through boiler explosions, which is not at all surprising when you peruse the Appendix D, which demonstrates the startling facts that out of 27 formal enquiries into the circumstances attending boiler explosions during the year ending June 30th, 1895, causing the death of 39 persons and injury to 56 persons. Not one boiler explosion out of the whole could the court of inquiry attribute to an unavoidable accident. On the contrary, it shows that such explosions were entirely due to ignorance, negligence, and want of inspection. One case, with a boiler 20 years old, because the steam gauge was graduated at 80 lbs. per square inch, additional weights were put upon the safety valve, culminating in an explosion.

"Another case, owner worked boiler 27 years at 60 lbs. pressure to the square inch without any examination, and was somewhat astonished when it exploded, as he thought it should work for an indefinite period without examination.

"Another case, where plates had deteriorated from $\frac{4}{16}$ of an inch in thickness to $\frac{1}{16}$, resulting in an explosion killing five men.

"Another steam user thought his boiler was quite safe so long as his hammer did not go through the plates when tapping them."

These astonishing revelations must convince Parliament that the eloquent appeal of the court investigating the boiler explosion at the Bridgend, Glamorganshire, North's Navigation Collieries, Limited, 1889, ought to be acted upon, as it speaks out plainly, stating that Special Rules for collieries should demand in no uncertain terms that boilers are to be thoroughly inspected, and at what intervals of time they are to be inspected, and by whom this very important duty is to be performed; and unless Parliament does interfere we shall see more of those terrible fatalities, which the enactment of all the foregoing clauses would diminish.

In claiming your support, it cannot be denied that if the above is to be accomplished, the following provisions should be inserted in the Mines Regulation Act:—

> 1st.—"That indicator attached to winding engines at pits where men ascend or descend shall not travel more than once round, minus one inch of each side of the centre, when indicating distance from the surface to bottom of the shaft."

No one knows the necessity of such provisions better than Government inspectors and engine-winders, as it is a well-known fact that if indicators travel more than once round when registering distance from surface to bottom engine-winders are very liable to make mistakes, as it becomes necessary for them to keep count, which is a most dangerous practice, as the slightest omission on engineman's part might lead him to the conclusion that cages were only in the middle of the shaft when such were really approaching the surface—which would mean certain destruction by overwinding and very likely loss of life.

There is an instance on record where the indicator of an engine at a colliery in the Wigan district, some years ago, made exactly one revolution when registering distance from surface to bottom, consequently the finger pointed exactly to one mark for both cages; result was engineman during night-time forgot which cage he had at surface, started wrong way, killing several miners. This would very probably have been avoided had the indicator travelled less than one revolution, as it would have pointed to different marks for each cage; hence the necessity for the foregoing provision.

> 2nd.—"That colliery owners provide all engine-winders with a report book, so as to enable them to give their opinion respecting the state of the engines (in addition to the book provided for machinery inspector under Rule 5 of Mines Regulation Act, 1887)."

Special Rules in West Lancashire compel engineman to examine the state of his engine, &c. (see Rule 96); also to report to his superior officer any defect he may observe. However, such reports are generally given orally to inspector appointed in accordance with General Rule 5, who, in some instances does not attempt to remedy such defects, or even report them. The result is that accidents occur through such defects; and the inspector, on such occasions, is subject to a bad memory, as he really cannot remember the engineman ever having spoken to him about such defect. Therefore, if enginemen are to examine, let the Mines Act demand that enginemen shall make a true report of such examination, and every such report be recorded in writing and signed by engineman.

> 3rd.—"That engine-winders' representatives be allowed to take part in the framing of Special Rules."

This is a question of vast importance, owing to the peculiar nature of the engine-winders' work, which does not seem to be fully comprehended by those who framed Special Rules in connection with the Coal Mines Regulation Act, 1887. For instance, in Lancashire, enginemen are supposed to examine the ropes, which is almost impossible, unless he gets someone to turn the engines round whilst he examines ropes coiling on or off the drum, as he cannot make any adequate examination of the ropes and stand at the handles turning the engines round. He is also held responsible in banksman's absence for persons descending the pit without permission from the proper authority, and has to see that no person goes down the pit in a state of intoxication, and that no intoxicating drinks are taken down the pit without the consent of the manager, in addition to seeing that the safety gates are in a proper position. These duties cannot be fulfilled by engine-winders with anything like satisfaction during night-time, as the enginemen are such a long distance from the fence gates and place where men get into the cage, that it is impossible for him to see whether men are strangers or intoxicated; and if he left his handles to go and see while they were getting into the cage he would be violating Special Rule 102, which places engine-winders in a most objectionable position.

These facts are quite sufficient to demonstrate that engine-winders, by all means, should have a voice in the making of special Rules for mines' regulation.

Your consideration and support in favour of the foregoing will be greatly appreciated both by engine-winders and miners, and will entitle you to the gratitude and thanks of your countrymen.

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APPENDIX III.

COAL MINES REGULATION BILL PROMOTED BY THE MINERS FEDERATION.

A Bill to amend the Law relating to Coal Mines (*presented by Mr. Wadsworth, supported by Mr. William Abraham (Rhondda), Mr. Enoch Edwards, Mr. Harvey, Sir Joseph Leese, Mr. Brace, Mr. Keir Hardie, Mr. James Haslam, Mr. Glover, Sir Alfred Jacoby, and Mr. William Johnson. Ordered by the House of Commons to be printed, February 15th, 1907. [Bill 24.]*).

ARRANGEMENT OF CLAUSES.

SPECIAL RULES.

Clause 1. Special rules for mining districts.
„ 2. Making of special rules.

MISCELLANEOUS.

„ 3. Amendments relating to shafts.
„ 4. Board for appointing examiners.
„ 5. Amendments relating to accidents.
„ 6. Examination of mines by inspectors.
„ 7. Appointment of assistant inspectors.
„ 8. Investigation of explosion and accidents.
„ 9. Jury at coroner's inquest.
„ 10. Proceedings at coroner's inquest.
„ 11. Amendments of general rules.
„ 12. Supply of copies of Act and special rules.
„ 13. Interpretation.
„ 14. Repeals.
„ 15. Construction and short title.

SCHEDULE.

Be it enacted by the King's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:—

SPECIAL RULES.

1.—(1) There shall be established in every mining district such special rules for the conduct and guidance of the persons acting in the management of mines in the district, or employed in or about such mines, as under the particular circumstances of the district may appear best calculated to prevent dangerous accidents, and to provide for the safety, convenience, and proper discipline of the persons employed in or about the mines in the district.

(2) The special rules shall be observed in and about every mine in the district for which the rules are established in the same manner as if they were enacted in this Act.

(3) If any person who is bound to observe the special rules established in any district acts in contravention of or fails to comply with any of them he shall be deemed to be guilty of an offence against the Coal Mines Regulation Act, 1887 (in this Act referred to as the principal Act), and also the owner, agent, and manager of the mine in or about which the offence occurs shall each be deemed to be guilty of an offence against the principal Act unless he proves that he had taken all reasonable means, by publishing and to the best of his power enforcing the special rules, to prevent such contravention or non-compliance.

(4) The provisions in the principal Act relating to special rules made under that Act shall, so far as they are not hereby repealed, apply to special rules made under this Act.

(5) All special rules made under the provisions of the principal Act and in force in any mine to which special rules made for a district under this Act apply, shall be repealed from the date on which the special rules for the district come into operation.

2.—(1) The Secretary of State shall draw up special rules for each mining district, after ascertaining, in such manner as he thinks fit, the opinions of representatives of owners of mines in the district, and of representatives of workmen employed in such mines, and of the inspector of mines for the district.

(2) *Expenses incurred by the Secretary of State under this section shall be paid out of moneys provided by Parliament.*

(3) The Secretary of State shall lay special rules before Parliament as soon as possible after they are drawn up, and they shall come into operation at the end of three months from the time when they are laid before Parliament.

MISCELLANEOUS.

3. In section sixteen, subsection one, of the principal Act for the paragraphs marked (*a*), (*b*), and (*c*) the following paragraphs shall be substituted, namely:—

(*a*) There must be at least two shafts or outlets with which every seam for the time being at work in the mine shall have a communication:

(*b*) Where a seam extends for more than one mile there shall be at least two shafts or outlets in every mile with which every seam for the time being at work in the mine shall have a communication; provided that the senior inspector for a district shall have power to exempt any mine in his district from this requirement, if in his opinion the mine is either non-fiery, practically worked out, or worked under a mountain or under the sea:

(*c*) Such shafts or outlets must in all cases afford separate means of ingress and egress available to the persons employed in every such seam, whether the shafts or outlets belong to the same mine or to more than one mine:

(*d*) Such shafts or outlets must not at any point be nearer to one another than fifteen yards, and there shall be between such shafts and outlets a communication not less than four feet wide and four feet high, and in the case of communications made after the commencement of this Act between shafts or outlets, not less than five feet high:

(*e*) Proper apparatus for raising and lowering persons at each such shaft or outlet shall be kept on the works belonging to the mine; and such apparatus, if not in actual use at the shafts or outlets, shall be constantly available for use:

(*f*) There shall be placed at convenient situations in the mine, for use in the case of accident, plans or other indications of the easiest means of gaining access to the return airways.

4. Six persons employed, or who have been employed, as workmen in any mine, not being owners, agents, or managers of a mine, shall be members of any board established under section twenty-three of the principal Act for the appointment of examiners for the purpose of granting certificates of competency under that Act.

5.—(1) In section thirty-five of the principal Act, at the end of subsection two, the following words shall be added, namely:—

Where loss of life or personal injury has occurred as aforesaid, the owner, agent, or manager of the mine shall allow a person authorised by the injured person or his representative to visit the place of the explosion or accident at any reasonable time, and to make a plan of the place, and to obtain any reasonable information.

(2) In section thirty-five of the principal Act, after subsection three, the following subsection shall be added, namely:—

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Every owner, agent, or manager of a mine shall keep a register of accidents, and shall enter therein every accident occurring in or about the mine causing personal injury to any person employed in or about the mine within one week after the occurrence of the accident, and this register shall be at all times open to inspection by the inspector of the district.

6. In section forty-one of the principal Act, at the end, the following words shall be added, namely:—

In every district an inspector shall make a complete examination of every mine, and every part thereof, at least once in every six months;

It shall be the duty of an inspector making any inspection, examination, or inquiry under this section, in any mine or part thereof, within six days, to enter in writing in a book to be kept for the purpose in the mine, a report of such inspection, examination, or inquiry.

7.—(1) In every mining district as defined in this Act a Secretary of State shall appoint assistant inspectors so that there shall be an inspector for every ten thousand persons employed above or below ground in connection with mines in the district.

(2) In the appointment of assistant inspectors preference shall be given to persons having practical knowledge of the working of mines, and especially to persons who hold certificates of competency under the principal Act.

(3) A Secretary of State may remove any assistant inspector, and may grant him such salary as the Treasury may approve.

(4) *The salaries of assistant inspectors, and the expenses incurred by them, shall be paid out of moneys to be provided by Parliament.*

(5) The assistant inspectors shall be generally under the control of the senior inspector of the district, and may perform any of the duties of an inspector which may be delegated to them, either generally or in special cases by the inspector, and shall also perform any duties which may be assigned to them by a Secretary of State.

(6) Any special report made by an inspector or an assistant inspector with respect to an explosion or accident shall be presented to a Secretary of State, and shall also be included in the inspector's annual report.

8. Where an explosion or accident has occurred in any mine, and an application in writing signed by six workmen employed in the mine is made to the Secretary of State, requesting him to direct an investigation to be held of such explosion or accident, and of its causes and circumstances, the Secretary of State shall direct such an investigation to be held, and the provisions of section forty-five of the principal Act shall apply to such an investigation.

9. In section forty-eight of the principal Act, there shall be substituted for subsection seven the following words, namely:—

The jury empanelled on the inquest shall include at least three persons who are or have been practical miners; but any person having a personal interest in, or employed in; or in the management of, the mine in which the explosion or accident occurred shall not be qualified to serve on the jury; and it shall be the duty of the constable or other officer not to summon any person disqualified under this provision, and it shall be the duty of the coroner not to allow any such persons to be sworn or to sit on the jury.

10. At any coroner's inquest on the body of any person whose death may have been caused by any explosions or accidents in or about mines—

(1) The inspector of the district shall be called as a witness by the coroner:

(2) Any person authorised by one or more workmen at the mine at which the explosion or accident has occurred may attend and examine any witness, either in person or by his counsel, solicitor, or agent.

11. The general rules contained in section forty-nine of the principal Act shall be amended as follows:—

(1) In rule one there shall be added after the first paragraph the words following, namely:—

Any air crossing, made after *the passing of this Act*, whether undercast or overcast, shall be driven in the solid.

(2) The following provisions shall be substituted for the first and second paragraphs of that part of rule four which relates to inspection before commencing work:—

(i) One or more competent persons, who have passed an examination of competency, to be held under rules to be made by a Secretary of State, and have had at least five years' practical experience at the working face, and are not contractors for getting minerals in the mine, or in the employ or pay of such contractors, shall be appointed by the owner, agent, or manager for the purpose, and shall within two and a half hours before the commencement of each shift inspect every part of the mine situate beyond the station or each of the stations and in which workmen are to work or pass during that shift, and shall ascertain the condition thereof so far as the presence of gas, ventilation, roof and sides, and general safety are concerned;

(ii) The inspection shall extend to all working places in which work is temporarily stopped within any ventilating district in which the men have to work;

(iii) The person making the inspection shall enter in a book, to be kept in a mine for the purpose, a report of the inspection, and the book shall be kept in a convenient and accessible place, and be open at all times to the inspection of any person employed in the mine.

No workman shall pass beyond any such station until the part of the mine beyond that station has been so inspected, and the report has been entered in the said book.

(3) In rule eight, for paragraph (*a*), the following paragraph shall be substituted:—

(*a*) In any place in a mine in which there is inflammable gas.

(4) The following rule shall be substituted for rule thirteen:—

Rule 13.—Where a place is likely to contain a dangerous accumulation of water, the working approaching that place shall not at any point exceed eight feet in width, and there shall be constantly kept at a sufficient distance, not being less than five yards in advance, at least one bore-hole near the centre of the working, and sufficient flank bore-holes on each side.

(5) The following rule shall be substituted for rule fourteen:—

Rule 14.—Every underground plane on which persons travel, which is self-acting or worked by an engine, windlass, or gin, shall be provided (if exceeding thirty yards in length) with some proper means of communicating distinct and definite signals between the stopping places and the ends of the plane, and shall be provided in every case with sufficient manholes for places of refuge, which shall be placed at intervals of not more than ten yards, and on one side of the road only.

(6) The manholes mentioned in rule fifteen shall be placed at intervals of not more than twenty-five yards apart, and shall be on one side of the travelling road only:

(7) Every engine plane used in any mine shall be provided with proper travelling roads for the safety of workmen passing to and from the face of the working:

(8) The following rule shall be substituted for rule twenty-two:—

Rule 22.—Where the timbering of the working place is done by the workmen employed therein, suitable timber shall be provided at the working place by the owner of the mine, and the distance between the sprags or holing props where they are required shall not exceed six feet, or such less distance as may be ordered by the owner, agent, or manager.

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(9) The following words shall be added at the end of the first paragraph of rule twenty-four, namely :—

A person shall not be so appointed unless he holds a certificate of competency granted under regulations made by the Secretary of State ;

A person so appointed shall not be employed for more than eight hours during any consecutive twenty-four hours.

(10) The following provisions shall be added at the end of rule twenty-five, namely :—

(i) Enginemen shall give to hookers-on return signals before starting the engine when men are riding ;

(ii) All signals shall be registered until complied with ;

(iii) A speaking tube shall be erected at all collieries for the purpose of communication between the banksmen and winders.

(11) The following rule shall be substituted for rule twenty-six :—

Rule 26.—(i) Detaching and suspending hooks and safety catches shall be applied to all machinery by means of which persons are lowered into or raised out of a mine, and shall be taken to pieces, examined, cleaned, and oiled by a competent person at least once in every four months ;

(ii) There shall be not less than ten feet of clearance between the detaching hooks and the point of detachment when the cages are at the landing ;

(iii) A banksman shall be appointed and shall attend during the whole time that men are in the mine or ascending or descending. Engine keepers must remain in charge of the engines during the whole time that men are in the mine, and must not be withdrawn to perform other duties outside the engine-room. No engine keeper shall have charge of more than one winding or other engine during the whole time that persons are in the mine or in the shaft of the mine ;

(iv) Every engine keeper shall be provided with a report book, and shall once in every twenty-four hours enter in the book a report of the state of the engine.

(12) The following rule shall be substituted for rule thirty :—

Rule 30.—(i) There shall be attached to every winding engine which is used for lowering and raising persons an adequate steam and foot brake, and where other appliances are used for raising and lowering persons, an adequate brake shall be attached to the said appliance, and a proper indicator (in addition to any mark on the rope) showing to the person in charge of the engine the position of the cage or tub in the shaft. If the drum is not on the crank shaft, there shall be an adequate brake on the drum shaft. The indicator shall be so constructed as not to travel more than once round, minus one revolution of the drum, when indicating the distance from the surface to the bottom of the shaft ;

(ii) Not more than one winding engine shall in future be placed in one house, and partition walls shall be built between winding engines at present in one house.

(13) There shall be added at the end of rule thirty-two the following words, namely :—

All boilers shall be examined at least once in every six months, and cleaned at least once in every three months.

(14) The ambulances or stretchers, with splints and bandages, mentioned in rule thirty-four, shall be kept in the mine ready for immediate use in case of accident :

(15) The books mentioned in rule thirty-seven shall be kept in the mine :

(16) The following rule shall be substituted for rule thirty-eight :—

Rule 38.—(i) The workmen employed in any mine may from time to time appoint any persons who are or have been practical working miners to be examiners of the mine on their behalf ;

(ii) Such examiners may at any time examine the mine or any part thereof, or any old workings, shafts, machinery or apparatus connected therewith, and every facility shall be afforded for any such examination by the owner, agent, and manager of the mine, and by all persons in the mine ;

(iii) The examiners shall make a report in writing of every such examination, and shall communicate the same to the workmen, either by placing it in a book to be kept by the workmen for the purpose, or by reading it to a meeting of the workmen, or in such other manner as may be from time to time determined by the workmen ;

(iv) If the examiners on any examination consider that any danger exists or is to be apprehended in the mine, they shall make a report in writing to that effect to the inspector of the district.

(17) There shall be added, at the end of rule thirty-nine, the following words, namely :—

A person not now employed as a coal or ironstone getter shall not be allowed to work at the face of the coal or ironstone in any capacity until he has had three years' experience as a workman in the roadways.

(18) The following rule shall have effect as an additional general rule :—

The owner, agent, or manager of every mine shall provide at or near the mine a workshop at which all cartridges used in the mine shall be prepared and stored under regulations to be made by special rules. One such workshop may, with the approval of a Secretary of State, be provided for several mines.

12. The printed copy of the abstract and special rules mentioned in section fifty-seven of the principal Act shall be supplied to every person employed in or about a mine without the application required in that section.

13. In this Act, unless the context otherwise requires—

The expression "mining district" means a district for which an inspector of mines is for the time being assigned.

14. The Acts mentioned in the schedule to this Act are hereby repealed to the extent specified in the third column of that schedule.

15. This Act may be cited as the Coal Mines Regulation Act, 1907, and shall be construed as one with the principal Act, and the Coal Mines Regulation Acts, 1887 to 1896, and this Act may be cited collectively as the Coal Mines Regulation Acts, 1887 to 1907.

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SCHEDULE.

REPEAL.

Session and Chapter.	Title of Act.	Extent of Repeal.
50 & 51 Vict. c. 58.	The Coal Mines Regulation Act, 1887.	In subsection (1) of section sixteen, paragraphs (*a*), (*b*), and (*c*). In subsection (2) of section twenty-three, paragraph (*b*). In section forty-eight, paragraph (7). In section forty-nine:— In Rule 4, from "A competent person" to "to be safe," and from "A report" to "inspection." In Rule 8, paragraph (*a*). Rules 13, 14, 22, 26, 30, 38. Sections fifty-one, fifty-two, fifty-three, and fifty-four. In section fifty-seven, in paragraph (2), from "who applies" to "are paid."
59 & 60 Vict. c. 43.	The Coal Mines Regulation Act, 1896.	Subsection (1) of section five.

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LOVETT, Mr. L., Secretary, Leicestershire Miners' Association. (*See questions* 36917—37183.)

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MARRIOTT, Mr. WALTER, Derbyshire Miners' Association. (*See questions* 23777—24145.)

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MORGAN, Mr. DAVID WATTS, Agent, Rhondda Valley District, South Wales Miners' Federation. *(See questions* 30413-31031.*)*

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